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SEP 11 2003

STATE OF NEW HAMPSHIRE
Department of Environmental Services
Water Council

USA SPRINGS, INC. 03- 12 WC
RE: Application for Large Groundwater Withdrawal Permit
And Approval of Bottled Water Source

USA SPRINGS, INC.'S NOTICE OF APPEAL

The Water Council hears appeals of decisions of the Department of Environmental Seriices on requests for approval bottled water sourcespursuant to RSA 485: 1, II (g), and Env-Ws 389 et seq. RSA 21-O:14; RSA 21-O: 7, IV. See RSA 485:3.

USA Springs, applied for a large groundwater withdrawal permit under Env-Ws 388 et seq and approval for a bottled water source. Approval was denied by the Department on August 12, 2003. A Motion for Rehearing on the denial of the water withdrawal permit is being filed this date. This is an appeal to the Council of the denial of an approval of the bottled water source under RSA 485 and Env-Ws 389 et seq and the denial of an extension to consider additional information.

On February 3, 2003, USA Springs, Inc. filed its final report pursuant to Env-Ws 388.17 for a permit to withdraw groundwater from three (3) wells on its 98-acre parcel of property in Nottingham and Barrington in the amount of 75, 125 and 15 gallons per minute, respectively. Under the rules the Department of Environmental Services ("Department" or "NHDES") is required to act promptly on the submittal within 45 days. Env-Ws 388.23. On March 20, 2003, the applicant requested an extension to August 12, 2003, to evaluate a small localized area of historical contaminants on a neighbor's property (the Just Cause site, formerly the K&B site). If it were not for the discovery shortly before filing the final report of the contamination on the neighbor's property, NHDES has acknowledged on several occasions that the "permit for the requested large groundwater withdrawal would have been granted by now." Affidavit of Manu

Sharma attached as Exhibit 1. Please also see attached Exhbit 1-A Supplemental information from Mr Sharma, dated September 11, 2003.

On August 12, 2003, the NHDES, Water Division, unreasonably and unlawfully denied the applicant's application and pending request for additional time to allow the Department to review extensive information, not previously available, on the recently discovered contamination. The Department knew that this information had been compiled by the applicant in a strikingly short period of time, despite the unexpected refusal of the neighboring property owner to allow access for the conduct of essential field work. The applicant files this Motion for Rehearing seeking reconsideration of the denial of the extension for further time and the denial of the permits under Env-Ws 388 and 389 by the Department.

1. In New Hampshire it is well recognized that the State Constitution confers a fundamental right to use and enjoyment of one's property. N.H. Const. pt. I, art. 2. An owner of property has an indisputable right to reasonable use of groundwater beneath its land.

2. In 1998 the State Legislature adopted RSA 485-C and in 2001, the NHDES adopted a comprehensive set of rules, Env-Ws 388 and Env-Ws 389, intended to regulate the withdrawal of groundwater in excess of 40 gallons per minute for use as bottled water. These regulations are not only comprehensive but are also clearly more restrictive of private property rights than the common law rights of reasonable use. These regulations purport to restrict property rights so that a new water withdrawal can have no unmitigated adverse affect whatsoever on existing water users or the natural environment. Common law rights are said to be correlative and allow adverse affects on property owners to be shared, thus in effect readjusting allocation each time a new user enters the same region.

First Ground of Appeal

Information prepared by the applicant and at the request of the Department should be considered before final action on the application.

3. It was unreasonable and unlawful for the NHDES to refuse the applicant the time it unquestionably needed to a.) investigate the contamination conditions discovered just before finalizing the final report, pursuant to Env-Ws 388. 17, and b.) develop an approvable remedial action plan, which in turn should become a condition of the large groundwater withdrawal permit assuring control and isolation of the contamination from the large groundwater withdrawal wells.

4. Env-Ws 388.23(a) provides that "the Department shall issue or deny a large groundwater permit . . . within 45 days of receipt of the report prepared in accordance with the Env-Ws 388.17. The purpose of this deadline is to assure that an applicant obtains a prompt decision on a matter directly affecting important property rights. The NHDES itself has stated:

> "'DES finds that the purpose of the 45-day review period described in Env-Ws 388.23 is to provide the applicant with a time frame by which a decision will be made by DES. This provision, as DES also put it, operates "for the benefit of the applicant.'"

Letter of Acting Commissioner, Robert Monaco, dated April 24, 2003.

5. On March 20, 2003, the New Hampshire Department of Environmental Services granted the applicant an extension of the 45-day period to August 12, 2003. The purpose of this extension was to permit the applicant to conduct a full-site investigation of the contamination discovered on the neighboring property and to complete a full remedial action plan describing in concept how the contamination would be controlled and isolated from the groundwater withdrawal wells. At that time the applicant and the State reasonably expected the neighboring property owner to allow uninterrupted access as it had done consistently up to that time. Instead, the neighboring owner unexpectedly withdrew permission to conduct further field work. That further work was essential for the Site Investigation Report. See Affidavit of Attorney Shepard Bingham attached hereto as Exhibit 2.

6. Ordinarily, State rules, recognizing practical realities of mobilizing, conducting field investigations, awaiting laboratory results and preparing detailed engineering reports, allow a property owner 120 days to complete a site investigation report and 120 days after Department approval of the site investigation report to complete the development of a conceptual remedial action plan. Env-Wm 1403.07 (b) and 08 (b)

7. In this case, after the extension was granted on March 20, 2003, the neighboring property owner refused to grant permission for the applicant to conduct in-depth investigations on that property until June 2, 2003. This caused cancellation of scheduled contractors and resulted in delay of initiation of field work until June 4, 2003.

8. Despite this unexpected obstacle to performing the field investigation as both the applicant and the Department had anticipated when the extension was granted, the applicant worked diligently to overcome it, installed subsurface monitoring systems, obtained samples, expedited laboratory analysis (at much higher costs than normal), prepared the draft report of the site investigation and the draft conceptual remedial action report, all in just over two months between June 4th and August 12th, 2003. The last set of sample results were received from the laboratory on July 25, 2003.

9. In addition, the applicant met with the NHDES on May 9, 2003, and July 9, 2003, to report its progress on these matters. At the July 9 meeting, NHDES rebuffed attempts by the applicant's consultants to explain their progress on the schedule and work at the site, and said they did not wish to receive any progress reports in advance of obtaining the completed written submissions. See Affidavit of Manu Sharma attached as Exhibit 1.

10. The applicant requested meetings with the Department the week prior to August 11th to explain that the reports were being prepared as rapidly as possible to be delivered before August 12, 2003. At the Department's specific request the applicant submitted a request for a

short-term extension of the time to submit technical information on the contamination site and back-up for the water quantity issues, on August 11, 2003. At the time of the request for extension the applicant had informed the Department that, in addition to conducting a pump test at a cost well in excess of $1,000,000, (four to five times the normal cost of such testing) an enormous amount of resources had been expended to prepare a draft site investigation report and remedial action plan, and the reports were being reproduced for physical delivery to the Department as soon as it was possible to do so. In addition, the applicant explained to the Department that the investigation confirmed the initial understanding of the site conditions set forth in the February 3, 2003 Final Report.

11. At approximately 4:00 p.m. on August 11, 2003, the Department asked the applicant to submit a request to extend the deadline for the Department's action and file it before close of business on that same day. The applicant prepared such a letter and filed it before 5:00 p.m. that same day. Department officials made the request knowing that a length letter had already been drafted denying the permit. Remarkably, the Department did not tell the applicant it had prepared such a decision.

12. Incredibly, the next morning, August 12, 2003, the Department proceeded to issue the 27-page decision denying the permit without waiting to receive the technical reports, which it knew existed and which were delivered on the afternoon of August 12, 2003, to the Department.

13. On several occasions between February and August, 2003 and thereafter, NHDES representatives have clearly stated that the water quantity issues are all resolvable and the only reason to delay issuance of the permit was the contamination in the neighboring Just Cause site (formerly the K&B property) and the western border of the project site. In retrospect, it is now apparent that these statements were being made and are still being made to the applicant in

direct contradiction to the overstated technical positions in the Denial Letters Decision and Finding.

14. Essentially, the two grounds for denial were 1) lack of information about the contamination on the neighboring property (i.e. the Site Investigation Report ("SIR") combined with a sufficiently specific conceptual plan (i.e. Remedial Action Plan ("RAP") for controlling it, and 2) the lack of technical detail and backup information supporting the Final Report's water quality results, despite the fact that the attached Gradient letter was delivered to the Department on August 12, 2003. See attached Exhibit 3.

15. Under these circumstances, it is clear that the action of the Department in refusing to allow the applicant more time was illegal and unreasonable as a matter of law. There is no basis in law for the Department to deny the applicant enough time to have its application augmented by data needed to be submitted in final form. The purpose of the time limitation is to protect the applicant from unreasonable delay by the Department. The unfairness and unreasonableness of this action is especially clear in a case where the applicant was forced to deal with an investigation of contamination on a neighbor's property, for which the applicant bears no legal responsibility, and was subjected unforeseeably to refusal by the neighboring property owner to allow the investigation to proceed until, as a practical matter, it would be very difficult to perform the investigation and file the remedial plan before the end of the first extension period.

Second Ground of Appeal

The applicant is entitled to an approval with conditions and the Department's position that it has no authority to employ conditions for approval is legally incorrect.

16. The allegations set forth in paragraphs 1 through 15 above are hereby restated and incorporated as if fully set forth in this section

17. While the Department unquestionably has authority to grant a large groundwater withdrawal permit with conditions, it has so far declined to do so with the unavoidable effect of imposing significant additional and unwarranted process and cost on the applicant, whose application should have already been approved with conditions. In refusing to use conditions to approve a permit, the Department unlawfully ignores the provisions of its own regulations, Env-Ws 388, which are replete with references to conditions to be employed in precisely the circumstances at issue here.

18. The small localized area of contamination, which was recently discovered on the neighboring property, is considered an "adverse impact" under the large groundwater withdrawal regulations. In other words, if such contamination is within the area from which the production well will draw water it must be "controlled," which is a form of "mitigation" under the rules. Any adverse impact as defined by the rules must be avoided or the permit will include satisfactory conditions for implementation of a mitigation plan before a water withdrawal well can go into operation. Significantly, the rules do not require that mitigation be completed before a permit is issued.

19. Adverse impacts are defined in Env-Ws 388.18 (c), and include "the contamination of groundwater obtained from wells or surface waters from contaminated groundwater whose flow has been altered by the withdrawal." Env-Ws 388.18 (c) (10) According to the NHDES Fact Sheet this means that the withdrawal shall not alter the flow of contaminated groundwater such that it further contaminates either water wells or surface waters. The applicant's proposal will do neither. The rules clearly provide that adverse impacts may be subject to a mitigation plan and monitoring, as a condition of the large groundwater withdrawal permit.

20. A permittee will "implement an impact mitigation program for withdrawals when a withdrawal permit requires mitigation from the start of operation to prevent adverse impacts anticipated during the permit application process" [emphasis added] Env-Ws 388.21 (a) (1). Among the numerous provisions referring to conditional permits in this context are the following:

> "Adherence to a mitigation program where required shall be a condition of the permit . . . . "

Env-Ws 388.21(d).

> "The permittee shall perform the following activities once an adverse impact is verified . . . (III) Where the impact mitigation program is a condition of the permit . . . ."

Env-Ws 388.21(b).

21. Similarly, Env-Ws 389 contemplates the preparation of a contamination source and water well inventory within the wellhead protection area. Env-Ws 389.08 and 389.09. The regulatory wellhead protection area for a bottled water supply is a 4,000-foot radius centered on the source, Env-Ws 389.08(b), and within that area, the applicant is directed to prepare an inventory "for each known contamination source ... the nature, extent and investigation and remedial action status of the contamination . . . ." Env-Ws 389.09(d).

22. For contamination sources the rules clearly contemplate development of a control program. "The objectives of the source evaluation shall be to . . "develop, if necessary, a contamination control program." Env-Ws 389 11(b)(4).

23. Finally, Env-Ws 389.17, titled Contamination Control Program, provides that "the applicant shall establish a contamination control program which minimizes the risk of contamination from known sources of contamination . . . [which] shall include provisions and a schedule for remediation and/or monitoring of residual contamination from all known

contamination sources identified in accordance with Env-Ws 389.16, which ensures the contamination shall not reach the groundwater source of bottled water".

24. The provisions of the contamination control program in the applicable groundwater withdrawal and bottled water source approval regulations do not require, before a permit is issued, as was suggested at one point by the State, the completion of an approved site investigation report and remedial action plan pursuant to the hazardous waste regulations. Env-Ws 389.11(b)(4); Env-Ws 389.17. Rather they require "a description of the contamination control program and supporting evaluations and documentation...." Env-Ws 389.17(d). This was provided in the August 12 filing by the applicant, and in the Final Report.

25. The Department has pointed to the provisions of Env-Ws 389.20, which provide that approval for a proposed bottled water source, (as distinguished from conditional approval for a large groundwater withdrawal permit), will not be granted "if an inadequately controlled contamination source is present in the source water protection area." Env-Ws 389.20(c)(1) [1] This application proposes a conditional permit under Env-Ws 388, which will ensure to the Department's satisfaction that localized contamination will be controlled and isolated from the production wells, thus meeting all the requirements of both sets of rules. Env-Ws 389.20 explicitly provides "approval by the Department [of bottled water sources] shall be contingent on compliance with the . . . impact assessment and mitigation requirements pursuant to RSA 485-C:4 XII and Env-Ws 388" [emphasis added]. "Contingent" in this section is clearly synonymous with "conditioned" on meeting all the requirements of Env-Ws 388. In other words, there is clear legal authority for the Department to issue a conditional approval for the water withdrawal permit under Env-Ws 388 requiring control and isolation of the localized contamination, and to

[1] Env-Ws 388.20 prohibits implementation of a monitoring and mitigation plan if it would cause impacts which are "irreversible" or "will occur immediately". Neither of these circumstances apply to this case.

issue a bottled water source approval, which is conditioned, or "contingent," on meeting all the requirements on Env-Ws 388, just as the rules provide.

26. Significantly, Env-Ws 389 does not prohibit approval of a bottled water if a contamination in the source water protection area is controlled pursuant to the mitigation plan which is a condition of a large groundwater withdrawal permit. Meeting all the requirements of Env-Ws 388. In other words, there is clear legal authority to issue the bottled water approval on the condition that all requirements of the *conditional* large groundwater withdrawal permit are met under Env-Ws 388.

27. There is clear legal authority in both regulatory programs, as well as the common law of the State, to impose conditions in the permit allowing performance after approval so long as fulfillment of the conditions occurs before operations begin. Appeal of the Londonderry Neighborhood Coalition. 145 N.H. 201 (2000) Yet the Department has thus far declined since the submittal of the final report on February 3, 2003, to acknowledge conditions of approval are appropriate, maintaining that it lacks legal authority to issue a conditional permit including a mitigation plan for the "adverse impact" of the small area of historical contamination on the boundary of the project site with adjacent property.

28. This is unlawful and unreasonable. It is not only contrary to the State regulations, but ignores the sound reasoning of our own State Supreme Court, which has specifically endorsed such an approach:

> "[I]f the Board could not impose a condition subsequent, both towns and applicants would lack a tool to adjust the pursuit of private interests to reasonable regulation in the public interest"

Nestor v. Town of Meredith, 138 N.H.632, at p 635 (1994)

Third Ground of Appeal

The Applicant has been subjected to an onerous, burdensome and fundamentally reinterpreted regulatory program not applicable to any other project

29. The allegations set forth in paragraphs 1 through 28 above are hereby restated and incorporated as if fully set forth in this section

30. It is unmistakably clear that NHDES applied the provisions of Env-Ws 388 to the USA Springs project in a more burdensome way in almost every respect than the program was applied to previous applications. To support this point the Golf Club of New England file is attached as Exhibit 4. The regulations were virtually reinterpreted as they were applied in this case, unfairly and unreasonably adding tremendous, unnecessary costs to the applicant's project A few examples will make this clear.

a. Ordinarily, pump tests, even for large municipal water supplies, do not require such an elaborate monitoring network, and particularly the installation of so many relatively expensive groundwater monitoring wells and piezometers or to be conducted for more than 5 to 7 days, as NHDES required of USA Springs in this case.

b. State bottled water source approval regulations provide for a pump test to operate 4 days with 3 days of antecedent monitoring and 2 days of post-withdrawal recovery monitoring. Env-Ws 389.11(d)(3)(b).

c. NHDES required USA Springs to conduct a pump test for 10 days with approximately 4 weeks of antecedent monitoring and 1 week of recovery monitoring.

d. Of the 71 monitoring locations imposed on USA Springs, 41 were relatively expensive new groundwater monitoring wells and piezometers. The total cost of these monitoring wells for installation, engineering, oversight and monitoring was approximately $125,000. On the other hand, the Golf Club of New England project included only 51 monitoring locations, with only 24 new shallow well installations at a total comparable cost of no more than approximately $36,000.

e. The Department knows, or should know, that such excessive monitoring, followed by protestations that it still does not have enough data (See Denial Letters, Decision

and Findings dated August 12, 2003) are unnecessary because operational monitoring can assure full protection of other water users and the environment.

f. In fact, in the Golf Club of New England case, there were central errors in the water budget, an important part of evaluation of the proper quantity to be safely withdrawn. Only 4% of the region's water was available for use by that applicant. Yet the department in that case approved the withdrawal utilizing a monitoring plan as a permit condition to obtain the additional information, rather than rejecting the application on the basis of each additional item of data, as it did in the USA Springs case.

g. Not only did NHDES cut off the time for the USA Springs applicant to submit information it wished to have the Department review, but it took an extreme position in characterizing each item of backup or detail data, which it knows it does not need to estimate the safe water withdrawal quantity, as a "separate and independent basis for denying the application on the asserted regulatory ground that the application fails to meet the provisions of Env-Ws 388.23(b)(1) and Env-Ws 389.20(a) that the application be " complete or correct". See Denial Letters, Decision and Findings, dated August 12, 2003, pp 3-23. This is just another example of the selective and discriminatory approach taken on the USA Springs case, apparently as a result of public and political pressure.

h. Although NHDES representatives assured the USA Springs project team on several occasions that their technical work was competent and their submittals were well-done, and that it is clear the requested quantity of water, 309,000 gallons per day, can easily be approved at this site, the Department has mischaracterized (in its lengthy, repeated requests for additional data and in its Denial Letters, Decision and Finding) the completeness of the applicants work. It has employed such language, giving the false impression that a decision cannot be rendered on the applicants technical water quantity submissions, when NHDES knows it can. NHDES has acknowledged to the project team that each of these technical items (for example, those in the April 11, 2003 letter) is minor and will not materially affect the approval. It should have known that distributing such mischaracterizations has only increased the intensity of the public opposition to the project.

i. In fact, the applicant knows of no other case before NHDES where an electronic mail broadcasting system was used to report all the applicant's filings, almost contemporaneously with delivery to the Department, to opponents who have been engaged, as the Department knows, in unfounded opposition, at times, to this project. Neither the right to know law, RSA 91-A, nor the Department's obligation to work with an applicant justifies or conforms to this practice.

j. Even more egregious was the Department's intentional listing of the applicant's property as a hazardous waste clean-up site, which it clearly is not.

k. Contamination was discovered on the Just Cause/K&B neighboring property in a small localized area on the southwestern border of the applicant's 98-acre site. Three (3) days after filing a report with NHDES of the discovery of this contamination, not only was the K&B site listed as a hazardous waste clean-up site (which is appropriate), but the innocent applicant's down gradient property onto which the contamination had migrated a short distance was wrongly listed as a hazardous waste clean-up site. Moreover, it was not listed in the name of the property owner but in the name of USA Springs, the company which seeks to develop a state-of-the-art bottled water facility on the land. As soon as the applicant discovered that this information was posted on the State's website and was cross-linked to the website and publicity issued by the opponents of the project, the applicant requested the removal of this incorrect listing.

l. The NHDES took the position that it was proper to list a down gradient innocent owner and it had done so in other cases. This is simply not so. The applicant has found no other instances in which this has been done to another property owner.

m. The applicant made a written request to remove this information and explained that there was no basis for it in a letter to the Assistant Attorney General dated February 28, 2003, which is attached Exhibit 5.

n. Despite the fact that the State was made aware that this unjustified publication of a misclassification of its project site (combined with agency misstatements about the contaminants actually found on the applicant's property) was giving rise to stigma and financial damage to the

applicant, NHDES refused to remove this listing from its website. Rather, it listed it on two other NHDES web sites.

o. On August 12, 2003, NHDES acknowledged that neither USA Springs nor the name of the underlying property owner at the project site should be on these hazardous waste site clean-up lists. Yet, it took approximately 5 ½ months to correct this detrimental designation, which caused significant financial damage to the project.

p. Finally, in sharp contrast to application of the rules to the USA Springs project, NHDES allowed the Golf Club of New England, despite the fact that it had submitted erroneous information, to begin pumping at nearly the same capacity requested by USA Springs three (3) months before the Department issued a permit.

31. In summary, these and other examples of evidence on the record, are unmistakably clear examples of selective, unlawful, unfair and unreasonable application of the State's regulations to this project. Perhaps most disturbing to the applicant is the fact that, as this case has progressed before the Department, the applicant has pointed out this discriminatory treatment repeatedly. Often the response has been to impose even more burdensome regulation on the applicant, rather than to treat it the way it has treated other applicants who are similarly situated.

Fourth Ground of Appeal

The Department is obligated to deal with the applicant in good faith and assist the applicant to obtain approval. In unreasonably and unlawfully denying this application, it has failed to meet this duty.

32. The allegations set forth in paragraphs 1 through 31 above are hereby restated and incorporated as if fully set forth in this section.

33. In acting on an application for a large groundwater withdrawal permit, the DES makes decisions about the applicant's use of its property, which are indistinguishable in purpose and effect from land use planning decisions under New Hampshire law. Our Supreme Court has held that local planning boards and town officials have a duty to treat the applicant in a fair and

unbiased manner, and further, to assist the applicant to obtain approval, so the NHDES has the same duty under the New Hampshire Constitution. N.H. CONST. Pt I, art. 1; Carboneau v. Town of Rye, 120 N.H. 96 (1980) That duty of a good faith dealing, unbiased consideration, fairness and reasonable action on the applicant's large groundwater withdrawal permit has not been met in this case.

34. The process of conducting a pump test, establishing a safe level of withdrawal and imposing a fully adequate monitoring program, particularly if the applicant is willing to accept the monitoring program, does not need to be difficult or unduly time consuming and expensive.

35. The duty to deal with this applicant in a nondiscriminatory, fair, consistent manner, and to assist the applicant in meeting objective regulatory standards has been violated by, among other things, refusing to consider information the applicant offered, mischaracterizing the evidence submitted as inadequate over and over again, when the Department has admitted the water quality information is sufficient to issue a permit, and in other cases the Department issues a conditional permit on less complete information. This is a breach of the duty to administer the regulations in good faith that has directly caused damages to the applicant

36. The DES has not applied its regulations to this application in the same way that it has applied regulations to other previous applications. Instead, presumably because the Department has been placed under political and public pressure, it has improperly burdened USA Springs with not one (1) public comment hearing as required by the regulations, but six (6). Furthermore, the NHDES Denial of August 12th purports to impose an added burden on the applicant's exercise of appeal rights, a seventh public comment hearing.

37. Even though the Department denied the applicant enough time to present all of its information, the Department has taken it upon itself in this case to employ a process it has used in no other case. On its own initiative it has compiled an electronic-mailing broadcast list, at

some of the public hearings invited all members of groups as large as 200 opponents of the project to put their names on the broadcast list, and then distributed information from the applicant's file to large numbers of people who are vehement opponents to the project. While this was evidently done in the name of making information available to the public, it has sustained and promoted what the Department knows is unwarranted, and often unreasoned and overly emotional opposition to the project.

38. In the large groundwater withdrawal application considered by the Department just prior to this one; the Golf Club of New England; the Department reviewed the final report of the pump test and found essential parts of the water calculations contained errors, and other data deficiencies yet allowed the applicant to begin pumping water (at essentially the same level as this applicant seeks) three (3) months before the permit was issued.

39. At technical meetings in the USA Springs case, the Department has described the applicant's work and submittals prepared by "competent professionals," and "sound and good work". However, in the comments made public by the Department this work has been described as presenting significant and "major" deficiencies. See NHDES letter dated September 11, 2002 The Department knew or should have known at the time that this approach, so different from its approach in other cases, only served to burden the applicant with more expense and a more opposition.

40. While pump tests ordinarily do not incur an expense greater than approximately $250,000 to $300,000 and involve a fraction of the sampling locations and costs required in this case, the Department continued to add sampling locations and requirements to the pump test demanded by the fervent opposition until the pump test cost approximately $1,250,000. Affidavit of Neil Shifrin, Exhibit 6.

41. The Department has known since early 2003 that the total cost to the applicant to obtain approval to withdraw groundwater at this site, exclusive of site acquisition costs and legal fees, is over $1.3 million dollars and mounting.

42. The applicant submitted an approvable large groundwater withdrawal application on February 3, 2003. All aspects of the final report can be analyzed in one of two categories. First, with respect to the pump test results and the calculation of a safe withdrawal limit, the Department knows that approximately 309,000 gallons per day can be withdrawn from this site. In fact, on numerous occasions the Department staff has acknowledged that there is plenty of water at this site and there is no question that water can be withdrawn at approximately that level. Remaining requests for data thereafter are truly details and backup information simply to sustain this conclusion. This conclusion is also backstopped by a comprehensive monitoring program that would go into effect after operations began. The Department knows that the applicant is willing to accept the monitoring plan that the Department wishes to impose in this case. Any lack of precision in the predictions of the pump test will be completely subsumed and easily managed during the comprehensive monitoring after operations begin. In other words, operations become a much more elaborate continuing pump test allowing the Department to monitor the operations continuously.

43. The other category for evaluation of the final report was the small (100 x 200 feet) localized area of historical releases of contamination on an adjacent property, which has migrated onto the southwest corner of the project property. This contamination was discovered and then confirmed in December 2002 and January 2003. The applicant's final report on February 3, 2003 details an additional field investigation which was done in January and February and proposes, as a binding condition on its large groundwater withdrawal permit, a requirement that a fully effective hydraulic barrier be installed between this localized

contaminant area and the large production wells, and that the contamination must be kept both controlled and isolated from the production wells. This proposal unquestionably meets the regulatory requirements. Such a condition would be lawful and would allow the Department to assure that the production wells would not begin operation until the contamination was controlled and isolated from the water well site. This application was approvable. The bottled user source approval under Env-Ws 389 would be "contingent" on meeting all the conditions of the groundwater withdrawal permit under Env-Ws 388.

44. After filing the Final Application in February 2003, the Department indicated that it would not approve the application and instead wanted additional information from the applicant. The applicant, therefore, requested an extension of the deadline under which the Department must act to August 12, 2003. The Department insisted that the applicant conduct a full site investigation and prepare a remedial action plan under the hazardous waste rules to characterize and prepare an engineered conceptual plan to remediate the neighbor's contamination. This is not required under the large groundwater withdrawal rules. All that would be required is to propose conditions that would achieve complete control of the contamination before pumping operation begin.

45. Knowing the extraordinary financial expense which has been imposed upon this applicant, and knowing that the application is approvable with conditions, the Department has nonetheless elected to require the applicant to expend further funds to investigate and develop a remedial plan for contamination on someone else's property before its permit can be issued. Instead, the Department should have granted the permit on the condition that the applicant develop a further detailed assessment of the contaminants, and install and demonstrate the complete effectiveness of a control system before operations begin. The Department must know

that having a permit with conditions in it allows the project to continue financing, and withholding the conditional permit makes continued project financing problematic.

46. As in the case of a local land use planning board, the agency has an obligation to consider the financial burdens of its approval process and not to add unnecessary costs to an applicant so that the applicant cannot afford to take its project all the way through the approval process. Batakis v. Town of Belmont, 135 N.H. 595 (1992)

47. The Department does not meet its duty to deal with the applicant in *good faith* and even *to assist* it in achieving regulatory approvals when it has, in effect, reinterpreted its own comprehensive regulations, selectively applying to only this case, and imposing burden of a process four to five times as large as it has imposed on another similarly situated project.

48. Then, having done this, the Department insists that it still does not know enough about the site and requires the applicant to expend tens of thousands of dollars to obtain additional backup data which the Department knew or should have known would make no difference in the decisional outcome, and tens to hundreds of thousands of dollars of expense to investigate contamination in the neighboring property. It clearly has authority, instead to issue a conditional approval and allow the investigation to proceed as the project develops. The applicant would then hold its large groundwater approval, thus preserving, rather than undermining the project's financial viability.

49. Essentially, the large groundwater withdrawal regulations provide for a groundwater withdrawal test during which monitoring is conducted at key locations in the natural environment and well water users in the vicinity.

50. Scientific interpretation of measurements during the pump test modeling and calculations based upon all available data set forth in the USA Springs final application dated February 3, 2003 clearly support a conclusion that 309,000 gallons per day can be withdrawn

from the three (3) production wells on the USA Springs site. This can be done while assuring that there will be no unmitigated adverse effects on other water well users with the natural environment as required by State regulations.

Fifth Ground of Appeal

The selective, standardless application of the Department regulations to this applicant violates substantive and procedural due process, and equal protection.

51. The allegations set forth in paragraphs 1 through 50 above are hereby restated and incorporated as if fully set forth in this section.

52. The NHDES has deprived USA Springs of property of procedural and substantive due process of law in violation of the fifth and fourteenth amendments of the United States Constitution and in violation of the New Hampshire Constitution. N.H. CONST. Pt. 1, art 35; pt 1, art 15; pt.1, art 2.

53. The NHDES has reinterpreted, deviated from and selectively applied its regulations in such a way that they violated USA Springs' constitutionally protected right to own, use and enjoy its property. The NHDES has applied the regulations in a manner that is fundamentally illegal, unreasonable and unfair to USA Springs

54. The NHDES regulations, as reinterpreted by NHDES in the USA Springs case, unduly restrict USA Springs' fundamental, inherent and natural property rights, and do not bear a reasonable relationship to regulatory objectives. The regulations are arbitrary and unreasonable as applied to USA Springs.

55. The NHDES has subjected USA Springs to a process that is far more extensive and far more costly than contemplated by the regulations for no legitimate reason, but in order to make it virtually impossible for USA Springs to obtain a permit.

56. The NHDES interpreted its regulations differently within a few months after the Acting Commissioner's written statement that the time period for decision operates to benefit the

applicant. Instead, the NHDES in August of 2003 treated the deadline as one that does not benefit the applicant, but rather benefits NHDES.

57. By reinterpreting the regulations and applying them to USA Springs in a manner they had never been previously applied, the NHDES has failed to provide adequate notice reasonably calculated to allow USA Springs to present its information in support of the permit in full, specifically the information regarding the contamination on a neighboring parcel of land.

58. By refusing USA Springs the time it unquestionably needed to investigate contamination conditions discovered just prior to finalizing the final report and to develop an approvable plan, particularly after the Commissioner had stated in writing accurately that the time period USA sought for review of its submittals operates to benefit the applicant, NHDES prevented the applicant from having full review of its submittals.

59. By arbitrarily refusing to follow the regulations that permit imposition of conditions on a permit, the NHDES has reinterpreted the regulations and has, in effect, issued "new" regulations so that USA Springs did not have adequate notice of the regulations. In fact, the NHDES had granted a temporary authorization to pump three months before the permit was issued; such a temporary authorization is akin to the permit with conditions that NHDES withheld from USA Springs when it reinterpreted its regulations.

60. The NHDES unilaterally and without notice reinterpreted its regulations again when it required USA Springs to bear the burden of six public hearings.

61. The NHDES unilaterally decided to employ a process, without notice of regulatory basis as required by RSA 541-A, when it decided on its own initiative to regularly disseminate information from the applicant's file to a large number of fervent opponents to the project.

62. The NHDES reinterpretation of its regulations as they apply to USA Springs and as they have not applied to prior applicants demonstrates that the regulations as applied are unconstitutionally vague and therefore they are void. Clearly the NHDES regulations, while appearing to be specific actually allow arbitrary and discriminatory application as has occurred with regard to USA Springs. N.H. CONST. Pt 1, art 15.

63. The NHDES, Water Division violated the equal protection guarantees of the State of New Hampshire (NH CONST. pt. I, art. 1 and art. 2) and of the fourteenth amendment to the Federal Constitution. "The equal protection clauses of both constitutions require a State to govern impartially; generally rules must apply evenhandedly to all persons within the jurisdiction. *Jones v. Helms*, 452 U.S. 412, 423 (1981); *State v. Pennoyer*, 65 N.H. 113, 115 ... (1889). Thus, the clauses generally forbid the legislature from imposing upon an individual burdens and liabilities that are not cast upon others similarly situated. *Jones,* 452 U.S. at 423-24; *Seabrook Police Assoc. v. Town of Seabrook*, 138 N.H. 177, 182-83...(1994)." Kerouac v. Town of Hollis, 139 N.H. 554 (1995).

Sixth Ground of Appeal

The Large Groundwater Regulations, Env-Ws 388, exceed statutory authority, purport to deprive property owners of long established rights of reasonable use of groundwater, on their face and as applied in this case and NHDES actions constitutes an unconstitutional taking of private property

64. The allegations set forth in paragraphs 1 through 63 above are hereby restated and incorporated as if fully set forth in this section

65. Env-Ws 388 et seq, on its face and as applied, clearly exceed the authority delegated to the Department by RSA 485-C and purport to deprive private property owners of long established common law rights of reasonable use of groundwater This large groundwater withdrawal program, as constituted in the regulations and administered in this case, also clearly constitutes an unconstitutional taking of USA Springs' private property, that it has the right to

possess, use and enjoy, in that USA Springs cannot make reasonable use of the groundwater under its real estate in violation of N.H. CONST, pt 1, art 2, 12 and the federal Constitution, 5th and 14th Amendments.

66. The State statute (RSA 485-C) and the implementing regulations as applied to the Applicant are so unreasonably onerous as to amount to a taking of Applicant's inherent natural property rights. They do not reasonably balance the rights of the owner with the common good. They go far beyond "preventing an owner from using his land in such a way that it causes injury to others or deprives them of the reasonable use of their land" (Burrows v. City of Keene, 121 N.H. 590, 598 (1981)), and as a result they are unreasonable and they are a taking that must be justly compensated. The Department has applied them arbitrarily and unreasonably to Applicant.

67. These reinterpreted regulations subjectively and unpredictably applied, on their face and as applied have no doubt interfered significantly with investment-backed expectations, resulting in a taking. (Claridge v. N.H. Wetlands Bd., 125 N.H. 745, at 752 (1984), citing Penn Central Transp. Co. v. New York City, 438 U.S. 104,124 (1977).) USA Springs purchased its property and submitted its application with notice of statutory and regulatory requirements in effect and as a result of those requirements held certain investment-backed expectations of groundwater development rights which rise to the level of constitutionally protected property rights. By reinterpreting its regulations in a heretofore unknown manner, the NHDES caused the project expenses and investment to grow unexpectedly large, destroying the investment-backed expectations of USA Springs.

68. USA Springs has the fundamental right to an economically viable use of its property. The NHDES' interference with USA Springs' fundamental property right to use the groundwater under its land is "sufficiently direct, sufficiently peculiar and of sufficient magnitude as to compel the ... [conclusion] that fairness and justice require that the burden be

borne by the ...[government] and not by" USA Springs. Burrows v. City of Keene, 121 N.H. 590, at 602 (1981)

WHEREFORE, the applicant respectfully requests that the Council:

a. Grant the applicant an extension to allow the Department sufficient time to evaluate information submitted on August 12th and thereafter ;

b. Direct the Department to consider additional information as it proposed to do in its letter dated August 12, 2003:

c. Direct the Department to follow its rules and consider a conditional approval of the bottled water source contingent on meeting all requirements of the conditional approval under Env-Ws 388.

d. Strike the requirement in the Denial letter for yet another public comment hearing, which is not required by any provision of the governing statutes or regulations.

Respectfully submitted,

USA SPRINGS, INC.

By Its Attorneys,

McLANE, GRAF, RAULERSON & MIDDLETON, PROFESSIONAL ASSOCIATION

Date: 9/11/03

By: _____

Gregory H. Smith
Claudia C. Damon
McLane, Graf, Raulerson & Middleton, P.A.
15 North Main Street,
Concord, New Hampshire 03301
Telephone (603) 226-0400

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing USA Springs, Inc.'s Motion For Rehearing has been forwarded this day, September 11, 2003, by first-class mail, postage prepaid, to Mark Beliveau, Esquire, E. Tupper Kinder, Esquire, and Assistant Attorney General Richard Head,

_____

Gregory H. Smith

Exhibit 1

STATE OF NEW HAMPSHIRE
Department of Environmental Services
Water Division

USA SPRINGS, INC.
RE: Application for Large Groundwater Withdrawal Permit

AFFIDAVIT OF MANU SHARMA

I, Manu Sharma, having been duly sworn, depose and say as follows:

1. My name is Manu Sharma and I am a Professional Engineer and a Principal in Gradient Corporation, a nationally recognized environmental consulting firm located in Cambridge, Massachusetts.

2. I received a Bachelors in Technology (B.Tech) degree in Civil Engineering from the Indian Institute of Technology, Bombay, India, in 1986 and a Master of Science (M.S.) degree in Civil Engineering from Syracuse University, New York in 1988.

3. For more than 15 years, I have been practicing as a hydrogeologist/engineer consulting on groundwater transport/modeling, environmental investigation/remediation, and risk assessment projects in the United States and abroad.

4. Groundwater withdrawal test (also referred to as pump tests) are conducted routinely throughout the world and interpreting the data collected during a pump test is a well-understood science.

5. During my career, I have overseen/performed and reviewed results from more than 50 groundwater withdrawal or pump tests ranging in magnitude from less than 10 to 1,100 gallons per minute (gpm). Of the pump tests conducted in the region, some of which were performed to establish large municipal groundwater withdrawal systems, none, other than this

one, to my knowledge, has incurred expenses of more than $300,000. The typical cost of a pump test for a water supply well is in the range of $75,000 to $200,000.

6. The pump test performed over 10 days at the USA Springs site involved the collection of a large amount of data from locations within a 14-square mile Study Area. Far more work was required to plan for, implement, and analyze this pump test than: 1) other pump tests conducted under New Hampshire's large groundwater withdrawal regulations; 2) any other similar project that I have been involved with; or 3) was necessary to properly establish a safe water withdrawal rate. This is especially so because USA Springs has always acknowledged the importance of monitoring and mitigation and proposed a plan, which would detect any potential adverse effects and address them appropriately. Thus giving the State complete authority to adjust the water withdrawal rate and mandate that other mitigation measures be implemented to ensure that there would be no adverse effects to other water well users or to other environmental resources.

7. I and others on the project team have been assured several times (both before and after August 12, 2003) by representatives of NHDES that if it were not for the discovery of a small area of localized contamination on the southwestern border of the USA site, "the project would have its groundwater withdrawal permit by now" and "water quantity" is really not an issue. NHDES has also acknowledged that the proposed withdrawal is located in a "water-rich" portion of the State with only a small number of water users.

8. I have also been assured personally on several occasions by NHDES representatives that the work of Gradient Corporation in submitting the preliminary application on July 18, 2002, and subsequent technical filings, was high quality and well-done. In a meeting on May 9, 2003, NHDES representatives stated to me that the State's April 11, 2003 letter, which

only addressed water quantity issues, would not even have addressed monitoring and mitigation issues, if this were not an "approvable" project. In this same meeting, NHDES representatives also stated that USA Springs should propose a monitoring and mitigation plan, and if the DES felt that any changes were needed they would include such modifications in the permit.

9. I have also reviewed the file for Golf Club of New England (GCNE), an overburden and bedrock withdrawal comparable to the proposed USA Springs withdrawal in size that has been granted a groundwater withdrawal permit since the State's Env-Ws 388 rules were enacted. The pump test planning process, monitoring scope, and data analysis required by NHDES for the USA Springs withdrawal test was significantly greater than the GCNE pump test, and added significant, unnecessary costs to the project.

10. NHDES identified a number of major deficiencies in the GCNE permit application. The water budget analysis presented in the GCNE submittal indicated that even using the unrealistic assumptions presented in the applicant's submittal only 4% of water in the system would be available after the withdrawal started operating. If more appropriate assumptions recommended by NHDES were to be used, the water budget analysis would indicate that the withdrawal would extract more water than was available in the system, thus indicating a high likelihood of adverse impacts. In contrast, the USA Springs water budget analysis indicates that at least 48% of water in the area will still be available after the proposed withdrawal starts operating.

11. Despite the deficiencies in the GCNE submittal the attitude of NHDES as reflected in its actions on that application and in the tone of its comments in the August 10, 2001 letter is strikingly conciliatory compared to its actions and tone in the USA Springs case. NHDES tells the prior applicant that proposed monitoring and mitigation will address NHDES

concerns, and there is no good and fair reason that should not also have been the case in USA Springs' application, especially since NHDES staff knows and has acknowledged that the USA Springs system has plenty of available water.

12. GCNE responded to NHDES' comments on the pump test with 112 pages of documents, and on the next day, NHDES granted the temporary authorization to withdraw water at a rate of 288,000 gpd. This is nowhere near the kind of consideration that USA Springs' permit has received from NHDES.

Further, the affiant sayeth not.

Manu Sharma
Gradient Corporation
238 Main Street
Cambridge, MA 02142

STATE OF MASSACHUSETTS
COUNTY OF MIDDLESEX

Subscribed and sworn to before me, this 11 day of September, 2003.

Notary Public/Justice of the Peace

Exhibit 1a

Exhibit 2

AFFIDAVIT of G. SHEPARD BINGHAM

I, G. Shepard Bingham, a practicing attorney-at-law In Topsfield, Massachusetts, hereby on. oath declare, under the penalties of perjury, that each and every one of the following statements is fully true and accurate:

(1) in my capacity as legal counsel for the Trustees of K & B Realty regarding the Trust's ownership of certain real estate on Turnpike Road in Nottingham, NH, I was engaged in limited communications with only three (3) representatives of the N.H. governmental authorities, Messers. Ralph Wickson of NH Department of Environmental Services, Mr. John Regan of NH Department of Environmental Services and Attorney Richard Head of N.H. Department of Justice.

(2) The entire written communications between mc and such parties is reflected in the attached correspondence dated, respectively: January 24, 2003, February 5, 2003, February 6, 2003, March 10, 2003, March 19 2003, June 13, 2003, June 19, 2003. June 24, 2003 and (via "cc" only) June 26, 2003.

(3) At no time did I ever say, or in any way indicate, to any governmental representative from New Hampshire that any individual or group involved with U.S.A. Springs, Inc., nor its proposed project on the abutting site, had caused my clients or my clients' consultants any delay, whatsoever, in conducting testing or gathering information in preparation of a Site Investigation Report for my clients' site prior to its conveyance to Just Cause Realty Trust

(4) Until a number of legal issues were resolved, in the best interests of my clients' they were not willing to grant access to their Nottingham, NH site for in depth investigation by the proponents of the U.S.A. Springs project. At all relevant times during the respective parties' efforts to resolve such issues, all parties proceeded diligently and in good faith.

Sworn and subscribed this 8th day of September, 2003.

G. Shepard Bingham, Esquire

COMMONWEALTH OF MASSACHUSETTS

Essex County, ss. September 8 , 2003

Then personally appeared the above-named G. Shepard Bingham, known to me, and did acknowledge under oath his foregoing signature to be his knowing and voluntary act, this day.

Notary Public

My commission expires:

JOHN EVANS
NOTARY PUBLIC
MY COMMISSION EXPIRES 10/11/07

COPY

EVANS, EVANS & BINGHAM
ATTORNEYS AT LAW

58 MAIN STREET, TOPSFIELD, MASSACHUSETTS 01983

WILLIAM G. EVANS
JOHN EVANS
G. SHEPARD BINGHAM
GARY E. EVANS

TELEPHONE (978) 887-2166
DANVERS (978) 774-5637
TELECOPIER (978) 887-3684

January 24, 2003

Mr. John Regan
Water Monitoring Division
New Hampshire Department of Environmental Services
P.O. Box 95
Concord, New Hampshire 03302-0095

RE: K&B Realty Trust
155 Old Turnpike Road, Nottingham, NH

Dear Mr. Regan:

Please be advised that I represent K&B Realty Trust, record owner of a 12 (+/-) acre parcel of realty situated on the northerly side of Route 4 known and numbered as 155 Old Turnpike Road, Nottingham, New Hampshire. During the course of an initial transaction screen performed on the subject property by Exeter Environmental on or about November 22, 2002, water samples were collected for analysis from an existing on-site supply well serving the subject premises. The laboratory results were obtained by this office on or about December 2, 2002. They suggest the existence of a reportable condition. Enclosed please find a list of all property owners within 1,000 feet of the K&B site.

In response to these preliminary findings, K&B Realty Trust has engaged Exeter Environmental to conduct a Site Investigation in order to confirm and evaluate the source and extent of any possible groundwater contamination. Six groundwater monitoring wells were installed in January, 2003. Obviously, we will undertake those steps necessary to remain compliant with your regulations. Upon completion of our investigation, we shall submit our findings, conclusions and proposed plan for remediation should that prove necessary.

Kindly direct all inquiries to my attention.

Thank you.

Very truly yours,

G. Shepard Bingham, Esquire

GSB/hwf
regan-gsb
Enclosures
cc: Steven B. Shope, President
Exeter Environmental Asso., Inc.

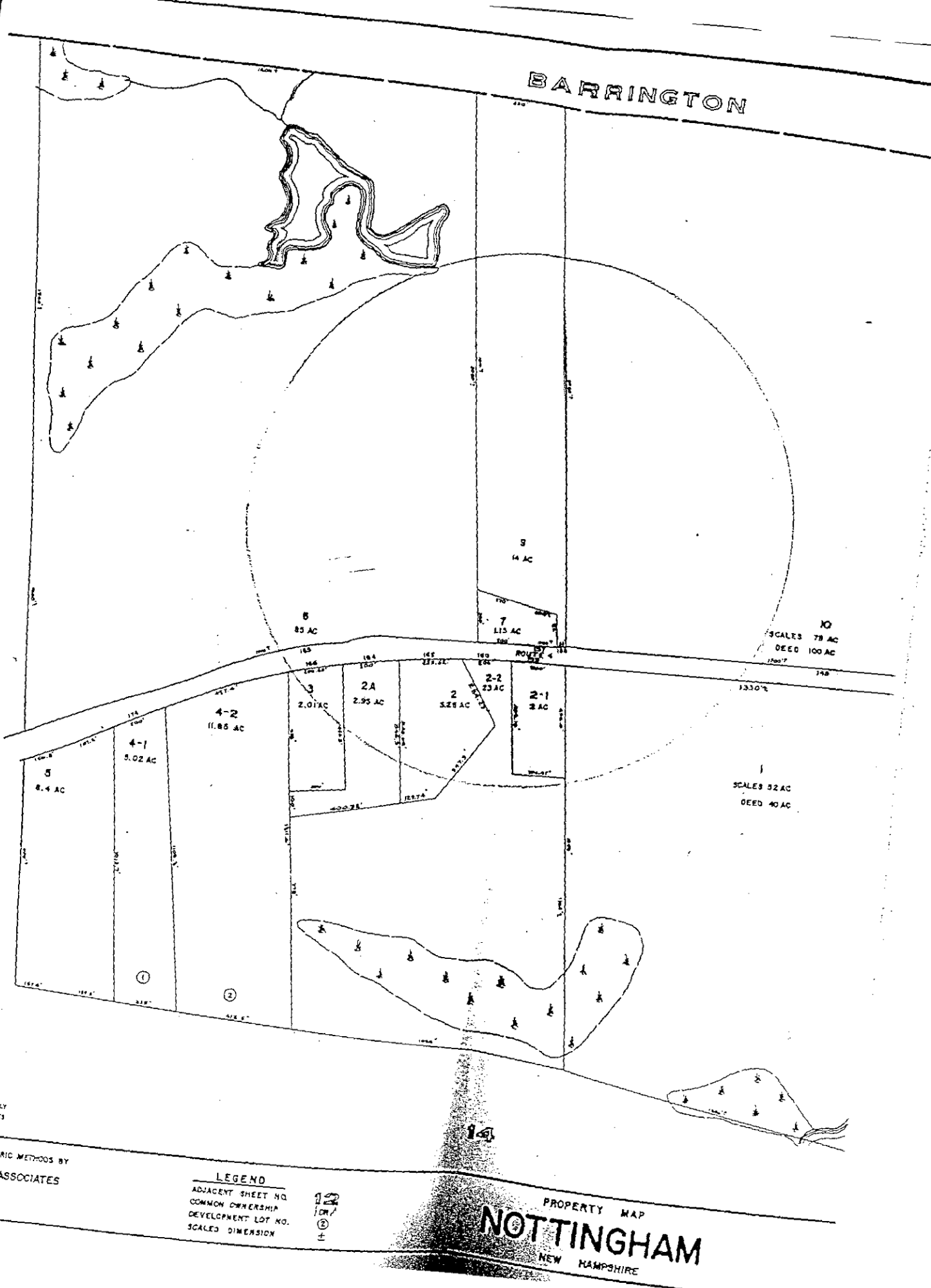
Certified Mail Return Receipt No.:
7002-0510-0002-99814-5230

List of Property Owners within 1,000 feet of K&B Realty Trust Property

155 Old Turnpike Road, Nottingham, NH

Dec-02

Map & Lot #	Address	Size (acres)	Name	Mailing Address
Map 3, Lot 1	Old Turnpike Road, Nottingham	52.00	Robert C. Pulcinella	Beauty Hill Road, Barrington, NH 03825
Map 3, Lot 2	162 Old Turnpike Road, Nottingham	3.28	Todd & Diane Grant	162 Old Turnpike Road, Nottingham, NH 03290
Map 3, Lot 2-1	158 Old Turnpike Road, Nottingham	2.00	Cory & Karen Hills	158 Old Turnpike Road, Nottingham, NH 03290
Map 3, Lot 2-2	160 Old Turnpike Road, Nottingham	23.00	Concrete Products Londonderry	c/o Brian Peavey, NE Concrete, P.O. Box 807, Amesbury, MA 01913
Map 3, Lot 2A	164 Old Turnpike Road, Nottingham	2.94	Irene Gillespie	164 Old Turnpike Road, Nottingham, NH 03290
Map 3, Lot 3	166 Old Turnpike Road, Nottingham	2.01	Susan LeClair	P.O. Box 60, West Nottingham, NH 03291-0060
Map 3, Lot 4-2	Old Turnpike Road, Nottingham	11.85	Jeffrey Pitre & Jennifer Higgins	62 Mill Road, Kingston, NH 03848
Map 3, Lot 6	165 Old Turnpike Road, Nottingham	81.40	Brett & Stephanie Gillespie	165 Old Turnpike Road, Nottingham, NH 03290
Map 3, Lot 7	157 Old Turnpike Road, Nottingham	1.23	Kevin Fraser	157 Old Turnpike Road, Nottingham, NH 03290
Map 3, Lot 9	155 Old Turnpike Road, Nottingham	14.00	K&B Realty Trust	c/o G.H. Harnum, P.O. Box 72, Nottingham, NH 03290-0072
Map 3, Lot 10	Old Turnpike Road, Nottingham	78.00	Francesco Rotondo, Trustee	Garrison Place Re Investment Tr, 9 Regis Drive, Pelham, NH 03076


BARRINGTON
2
3
14 AC
5
8.5 AC
7
1.15 AC
10
SCALES 78 AC
DEED 100 AC
ROUTE 4
3
2.01 AC
2A
2.95 AC
2
5.28 AC
2-2
2.3 AC
2-1
2 AC
4-2
11.85 AC
4-1
5.02 AC
5
8.4 AC
1
SCALES 32 AC
DEED 40 AC
14
12
OR
2
±
LEGEND
ADJACENT SHEET NO.
COMMON OWNERSHIP
DEVELOPMENT LOT NO.
SCALED DIMENSION
PROPERTY MAP
NOTTINGHAM
NEW HAMPSHIRE
Y PHOTOGRAMMETRIC METHODS BY
'DONNELL & ASSOCIATES
MAINE
XT PURPOSES ONLY
OPERTY CONVEYANCES

XMT REPORT

Feb. 05 2003 10:39AM

NO.	OTHER FACSIMILE	START TIME	USAGE TIME	MODE	PAGES	RESULT
01	6032712456	Feb. 05 10:37AM	02'26	TX	04	OK

XMT REPORT

Feb. 05 2003 10:36AM

NO.	OTHER FACSIMILE	START TIME	USAGE TIME	MODE	PAGES	RESULT
01	6032712110	Feb. 05 10:34AM	02'16	TX	04	OK

58 Main Street, Topsfield, MA 01983
Tel: 978 887 2166 Fax: 978 887 3684

Evans, Evans & Bingham

Fax

To: Richard Head, Esq. From: G. Shepard Bingham

Fax: 603-271-2110 Pages: 4

Phone: Date: 02-05-03

Re: K+B Realty Trust CC: 603-271-2456 (J. Regan)

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

Per your request, following are the lab results of 12/2/02.

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 34029

Client: Exeter Environmental Assoc., Inc. Client Designation: Harnum EEA#1433.01

Sample ID:	DW-1
Analytical Type:	Sample
Matrix:	aqueous
Date Sampled:	11/22/02
Date Received:	11/22/02
Units:	ug/l
Date of Analysis:	11/27/02
Analyst:	JDS
Method:	524.2
Dilution Factor:	1

AGQS

Dichlorodifluoromethane	< 0.5	
Chloromethane	< 0.5	
Vinyl chloride	**4.1**	2
Bromomethane	< 0.5	
Chloroethane	< 0.5	
Trichlorofluoromethane	< 0.5	
Diethyl Ether	< 5	
Acetone	< 5	
1,1-Dichloroethene	**100**	7
Methylene chloride	< 0.5	
Carbon disulfide	< 2	
Methyl-t-butyl ether(MTBE)	< 0.5	
trans-1,2-Dichloroethene	< 0.5	
Vinyl acetate	< 10	
1,1-Dichloroethane	**1400**	81
2,2-Dichloropropane	< 0.5	
cis-1,2-Dichloroethene	< 0.5	
2-Butanone(MEK)	< 5	
Bromochloromethane	< 0.5	
Tetrahydrofuran(THF)	< 5	
Chloroform	< 0.5	
1,1,1-Trichloroethane	**1.4**	200
Carbon tetrachloride	< 0.5	
1,1-Dichloropropene	< 0.5	
Benzene	< 0.5	
1,2-Dichloroethane	**1.2**	5
Trichloroethene	< 0.5	
1,2-Dichloropropane	< 0.5	
Dibromomethane	< 0.5	
Bromodichloromethane	< 0.5	
2-Chloroethylvinylether	< 2	
4-Methyl-2-pentanone(MIBK)	< 5	
cis-1,3-Dichloropropene	< 0.5	
Toluene	**1.9**	1,000
trans-1,3-Dichloropropane	< 0.5	
1,1,2-Trichloroethane	< 0.5	
2-Hexanone	< 5	
Tetrachloroethene	< 0.5	
1,3-Dichloropropane	< 0.5	
Dibromochloromethane	< 0.5	
1,2-Dibromoethane	< 0.5	

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 34029

Client: **Exeter Environmental Assoc., Inc.** Client Designation: **Harnum EEA#1433.01**

Sample ID:	DW-1
Analytical Type:	Sample
Matrix:	aqueous
Date Sampled:	11/22/02
Date Received:	11/22/02
Units:	ug/l
Date of Analysis:	11/27/02
Analyst:	JDS
Method:	524.2
Dilution Factor:	1
Chlorobenzene	< 0.5
1,1,1,2-Tetrachloroethane	< 0.5
Ethylbenzene	< 0.5
mp-Xylene	< 0.5
o-Xylene	< 0.5
Styrene	< 0.5
Bromoform	< 0.5
iso-Propylbenzene	< 0.5
Bromobenzene	< 0.5
1,1,2,2-Tetrachloroethane	< 0.5
1,2,3-Trichloropropane	< 0.5
n-Propylbenzene	< 0.5
2-Chlorotoluene	< 0.5
4-Chlorotoluene	< 0.5
1,3,5-Trimethylbenzene	< 0.5
tert-Butylbenzene	< 0.5
1,2,4-Trimethylbenzene	< 0.5
sec-Butylbenzene	< 0.5
1,3-Dichlorobenzene	< 0.5
p-isopropyltoluene	< 0.5
1,4-Dichlorobenzene	< 0.5
1,2-Dichlorobenzene	< 0.5
n-Butylbenzene	< 0.5
1,2-Dibromo-3-chloropropane	< 0.5
1,2,4-Trichlorobenzene	< 0.5
Hexachlorobutadiene	< 0.5
Naphthalene	< 0.5
1,2,3-Trichlorobenzene	< 0.5

Deviations from the Report:

DW-1	Parameter:	**1,1**-Dichloroethene	Date of Analysis: 11/30/2002	Dilution Factor:	10
DW-1	Parameter:	1,1-Dichloroethane	Date of Analysis: 11/30/2002	Dilution Factor:	10

eastern analytical, inc.

25 Chenell Drive / Concord, NH 03301 / TEL (603) 228-0525 / 1-800-287-0525
WEB: www.eailabs.com / FAX (603) 228-4591 / E-Mail: customer_service@eailabs.com

34029

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

REQUESTED ANALYSES

ITEM # for lab use only	SAMPLE I.D.	SAMPLING DATE / TIME	MATRIX A-Air S-Soil GW-Ground W. SW-Surface W. DW-Drinking W WW-Waste W ☐ Other	# of Containers	☒ 524.2 ☐ BTEX only ☐ MTBE only	☐ 8260B ☐ Oxygenates ☐ 8260B plus TICS ☐ 624	☐ 8021B ☐ 8021B-Halos ☐ 8021B-Aromatics	☐ 601/602 ☐ 601 ☐ 602	☐ Methane Only ☐ Methane & Ethane/Ethene	☐ MA VPH ☐ ME GRO ☐ 8015 GRO	☐ MA EPH ☐ PAH 8270	☐ TPH Fingerprint ☐ LI ☐ LII ☐ ME DRO ☐ 8015B DRO	☐ 8270 ☐ 625 ☐ ABN ☐ A ☐ BN ☐ TICS	☐ Pesticides/PCBs ☐ PCBs ☐ Pesticides	Dissolved Metals (list below)	Total Metals (List Below)	☐ TSS ☐ TDS ☐ TS ☐ TVS	☐ F ☐ Cl ☐ SO4 ☐ NO2 ☐ NO3	☐ pH ☐ Spec. Con. ☐ BOD	☐ T. Alk ☐ Carb. Alk ☐ Bi. Alk	☐ TKN ☐ NH3 ☐ T. Phos.	☐ COD ☐ TOC ☐ Phenols	☐ Oil & Grease ☐ TPH Method 1664	☐ Cyanide ☐ Sulfide	☐ Flash ☐ Ignit ☐ React CN ☐ React S2	☐ T Coli ☐ E Coli ☐ F. Coli ☐ F Strep	TCLP ☐ Metals ☐ VOC ☐ ABN ☐ Herbicides ☐ Pesticides				NOTES MeOH Vial #
	Dw-1	11-22-02 / 0900	Dw	2	X																										
PRESERVATIVE: H-HCl; N-HNO3; S-H2SO4; Na-NaOH; M-MEOH					H																										

COC del. w/ vials to Vols.

PROJECT MANAGER: Steven Shope
COMPANY: Exeter Environmental
ADDRESS: P.O. Box 451
CITY: Exeter STATE NH ZIP 03833
PHONE: (603) 778-3988 EXT:
FAX: 603-778-0104
E-MAIL: sshope@nh.ultranet.com
SITE NAME: Harrison
PROJECT # EFA # 1433.01
STATE: ☒ NH ☐ MA ☐ ME ☐ VT ☐ OTHER
☐ Site historically contaminated

☐ 8 RCRA Metals ☐ Fe, Mn ☐ 13 PP Metals
Other Metals
Dissolved Metals Field Filtered? ☐ Yes ☐ No

NOTES: (i.e., Special Detection Limits, Billing Info. if different)

RESULTS NEEDED BY
(enter preferred date): STD
(Guaranteed rapid turnarounds needs pre-approval)

QA / QC Reporting Level
☐ A ☐ B ☐ C

Reporting Options:
☐ Hard Copy ☐ Fax
Electronic:
☐ E-Mail ☐ Disk

Quote #
P.O. #

FOR LAB USE ONLY
Adhered to EPA Protocol ☐ Yes ☐ No (see attached)
Temp. 4.0 °C
Ice: ☒ Yes ☐ No
Custody Seal Intact? ☐ Yes ☐ No

Sampler(s): [signature]

	Date	Time	
Relinquished by [signature]	11-22-02	1038	Received by [signature]
Relinquished by [signature]	11-22-02	1155	Received by [signature]
Relinquished by	Date	Time	Received by

12/02/02 13:51 ☎603 778 0104 EXETER ENVIRON ☑004/005
12/02/2002 12:41 FAX 6032284591 EASTERN ANALYTICAL ☑004

XMT REPORT

Feb. 05 2003 01:52PM

	OTHER FACSIMILE	START TIME	USAGE TIME	MODE	PAGES	RESULT
	603 271 2181	Feb. 05 01:49PM	02'30	TX	05	OK

EVANS, EVANS & BINGHAM
ATTORNEYS AT LAW

58 MAIN STREET, TOPSFIELD, MASSACHUSETTS 01983

WILLIAM G. EVANS
JOHN EVANS
G. SHEPARD BINGHAM
GARY E. EVANS

TELEPHONE (978) 887-2166
DANVERS (978) 774-5637
TELECOPIER (978) 887-3684

February 5, 2003

Mr. John Regan
Water Monitoring Division
New Hampshire Department of Environmental Services
P.O. Box 95
Concord, New Hampshire 03302-0095

RE: K&B Realty Trust
155 Old Turnpike Road, Nottingham, NH
DES# 200302008

Dear Mr. Regan:

Pursuant to your request, enclosed herewith please find the laboratory results received with respect to the first round of water samples taken from those ground water monitoring wells installed on the K&B site during early January, 2003. Of course we will continue to keep your office appraised of our findings as we complete the second round of sampling.

We look forward to working together with your office to identify and resolve this matter in as efficient and economically feasible manner as possible.

Thank you.

Very truly yours,

G. Shepard Bingham, Esquire

GSB/hwf
regan-gsb
Enclosures

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 34633

Client: **Exeter Environmental Assoc., Inc.** Client Designation: **Harnum Rigging / EEA# 1433.01**

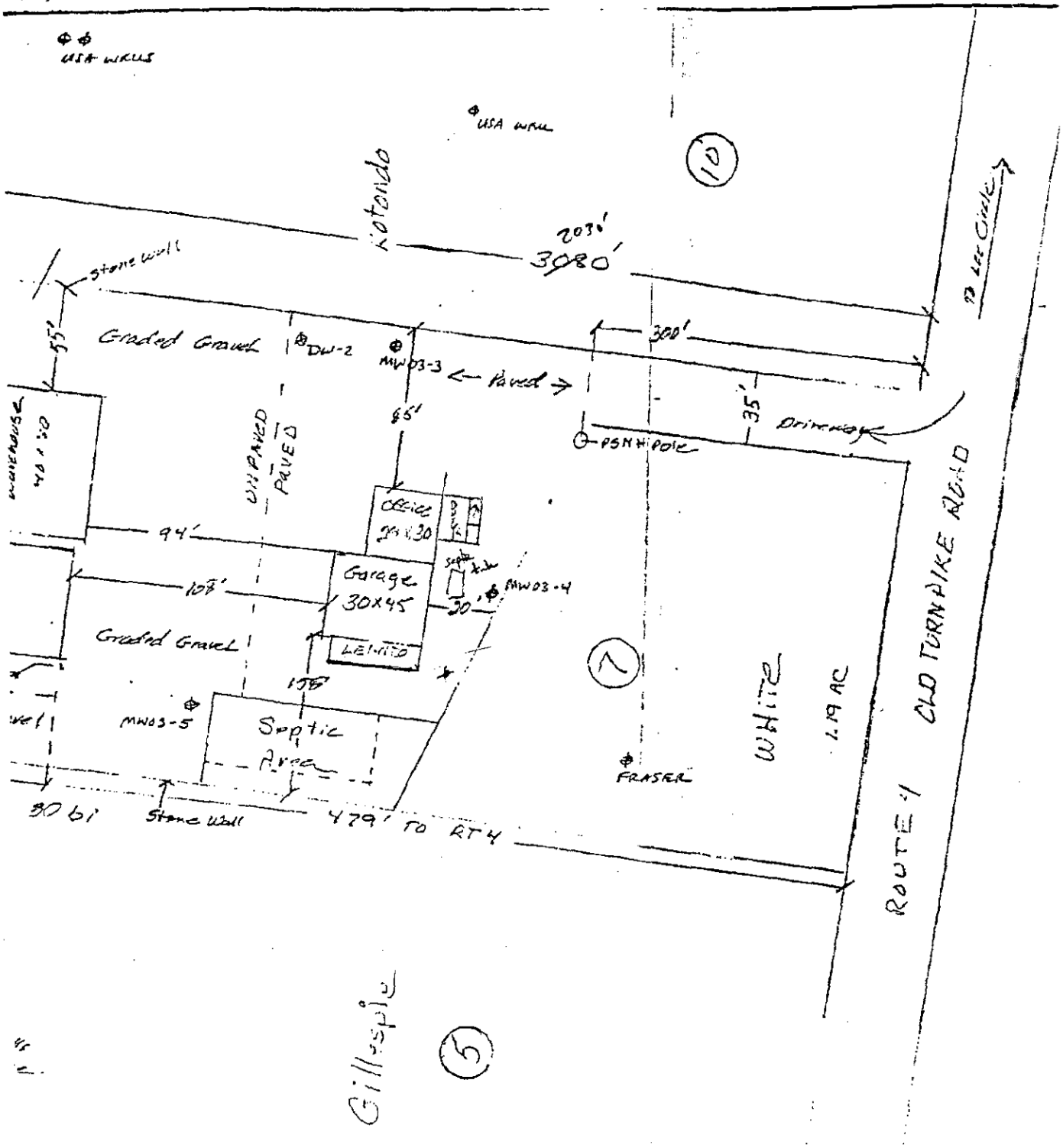
Sample ID:	MW03-1	MW03-2	MW03-3	MW03-4	MW03-5	MW03-6
Analytical Type:	Sample	Sample	Sample	Sample	Sample	Sample
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	1/13/03	1/13/03	1/13/03	1/13/03	1/13/03	1/13/03
Date Received:	1/14/03	1/14/03	1/14/03	1/14/03	1/14/03	1/14/03
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	1/15/03	1/15/03	1/22/03	1/22/03	1/15/03	1/15/03
Analyst:	JDS	JDS	JDS	JDS	JDS	JDS
Method:	8260B	8260B	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1	1	1
Dichlorodifluoromethane	< 5	< 5	5	< 5	< 5	< 5
Chloromethane	< 5	< 5	< 5	< 5	< 5	< 5
Vinyl chloride	< 2	< 2	< 2	< 2	< 2	< 2
Bromomethane	< 2	< 2	< 2	< 2	< 2	< 2
Chloroethane	< 5	< 5	< 5	< 5	< 5	< 5
Trichlorofluoromethane	< 5	< 5	< 5	< 5	< 5	< 5
Diethyl Ether	< 5	< 5	< 5	< 5	< 5	< 5
Acetone	50	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethene	< 1	< 1	9	5	< 1	< 1
Methylene chloride	< 5	< 5	< 5	< 5	< 5	< 5
Carbon disulfide	< 5	< 5	< 5	< 5	< 5	< 5
Methyl-t-butyl ether(MTBE)	< 5	< 5	< 5	< 5	< 5	< 5
trans-1,2-Dichloroethene	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloroethane	< 2	< 2	8	200	< 2	< 2
2,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2
cis-1,2-Dichloroethene	< 2	< 2	< 2	< 2	< 2	< 2
2-Butanone(MEK)	< 10	< 10	< 10	< 10	< 10	< 10
Bromochloromethane	< 2	< 2	< 2	< 2	< 2	< 2
Tetrahydrofuran(THF)	< 10	< 10	< 10	< 10	< 10	< 10
Chloroform	< 2	< 2	< 2	< 2	< 2	< 2
1,1,1-Trichloroethane	< 2	< 2	170	< 2	< 2	< 2
Carbon tetrachloride	< 2	< 2	< 2	< 2	< 2	< 2
1,1-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2
Benzene	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichloroethane	< 2	< 2	< 2	< 2	< 2	< 2
Trichloroethene	< 2	< 2	< 2	< 2	< 2	< 2
1,2-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2
Dibromomethane	< 2	< 2	< 2	< 2	< 2	< 2
Bromodichloromethane	< 2	< 2	< 2	< 2	< 2	< 2
4-Methyl-2-pentanone(MIBK)	< 10	< 10	< 10	< 10	< 10	< 10
cis-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2
Toluene	< 1	< 1	< 1	< 1	< 1	< 1
trans-1,3-Dichloropropene	< 2	< 2	< 2	< 2	< 2	< 2
1,1,2-Trichloroethane	< 2	< 2	< 2	< 2	< 2	< 2
2-Hexanone	< 10	< 10	< 10	< 10	< 10	< 10
Tetrachloroethene	< 2	< 2	9	< 2	< 2	< 2
1,3-Dichloropropane	< 2	< 2	< 2	< 2	< 2	< 2
Dibromochloromethane	< 2	< 2	< 2	< 2	< 2	< 2
1,2-Dibromoethane	< 2	< 2	< 2	< 2	< 2	< 2
Chlorobenzene	< 2	< 2	< 2	< 2	< 2	< 2
1,1,1,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2	< 2

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 34633

Client: **Exeter Environmental Assoc., Inc.** Client Designation: **Harnum Rigging / EEA# 1433.01**

Sample ID:	MW03-1	MW03-2	MW03-3	MW03-4	MW03-5	MW03-6
Analytical Type:	Sample	Sample	Sample	Sample	Sample	Sample
Matrix:	aqueous	aqueous	aqueous	aqueous	aqueous	aqueous
Date Sampled:	1/13/03	1/13/03	1/13/03	1/13/03	1/13/03	1/13/03
Date Received:	1/14/03	1/14/03	1/14/03	1/14/03	1/14/03	1/14/03
Units:	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Date of Analysis:	1/15/03	1/15/03	1/22/03	1/22/03	1/15/03	1/15/03
Analyst:	JDS	JDS	JDS	JDS	JDS	JDS
Method:	8260B	8260B	8260B	8260B	8260B	8260B
Dilution Factor:	1	1	1	1	1	1
Ethylbenzene	< 1	< 1	< 1	< 1	< 1	< 1
mp-Xylene	< 1	< 1	< 1	< 1	< 1	< 1
o-Xylene	< 1	< 1	< 1	< 1	< 1	< 1
Styrene	< 1	< 1	< 1	< 1	< 1	< 1
Bromoform	< 2	< 2	< 2	< 2	< 2	< 2
Iso-Propylbenzene	< 1	< 1	< 1	< 1	< 1	< 1
Bromobenzene	< 2	< 2	< 2	< 2	< 2	< 2
1,1,2,2-Tetrachloroethane	< 2	< 2	< 2	< 2	< 2	< 2
1,2,3-Trichloropropane	< 2	< 2	< 2	< 2	< 2	< 2
n-Propylbenzene	< 1	< 1	< 1	< 1	< 1	< 1
2-Chlorotoluene	< 2	< 2	< 2	< 2	< 2	< 2
4-Chlorotoluene	< 2	< 2	< 2	< 2	< 2	< 2
1,3,5-Trimethylbenzene	< 1	< 1	< 1	< 1	< 1	< 1
tert-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1
1,2,4-Trimethylbenzene	< 1	< 1	< 1	< 1	< 1	< 1
sec-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1
1,3-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1
p-Isopropyltoluene	< 1	< 1	< 1	< 1	< 1	< 1
1,4-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1
n-Butylbenzene	< 1	< 1	< 1	< 1	< 1	< 1
1,2-Dibromo-3-chloropropane	< 2	< 2	< 2	< 2	< 2	< 2
1,2,4-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1
Hexachlorobutadiene	< 1	< 1	< 1	< 1	< 1	< 1
Naphthalene	< 5	< 5	< 5	< 5	< 5	< 5
1,2,3-Trichlorobenzene	< 1	< 1	< 1	< 1	< 1	< 1



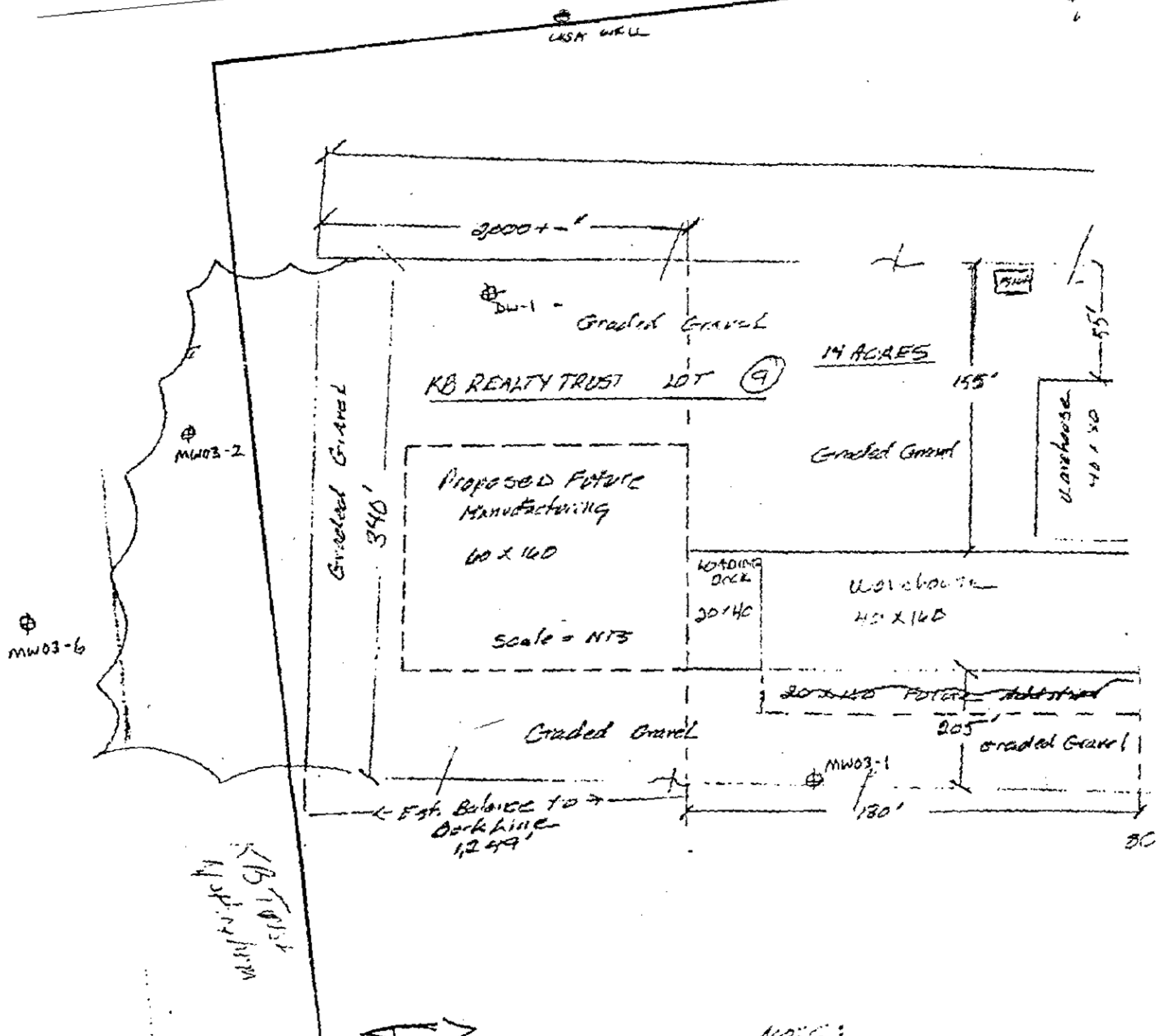
KB REALTY TRUST

SCALE: NTS	APPROVED BY: KHK	DRAWN BY: TBlack
DATE: 4-8-2000		

Town of Nottingham NH Lot 9 Map 3

Plot & Site Plan

DRAWING NUMBER: SP-1



NOTE:

All the positions of the Buildings & property were measured from known markers & bench marks of record (such as) stone walls, Roads & Markers. To the best of our Knowledge.

All Well Locations are very approximate. Not to scale

State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-2900 FAX (603) 271-2456

February 5, 2003

VIA CERTIFIED MAIL

Mr. G. Shepard Bingham, Esquire
Evans, Evans & Bingham
58 Main Street
Topsfield, Massachusetts, 01983

RE: NOTTINGHAM – K&B Realty Trust, 155 Old Turnpike Road (DES #200302008)

Dear Mr. Bingham:

The New Hampshire Department of Environmental Services (Department) has reviewed your correspondence dated January 24, 2003, regarding the parcel known and numbered as 155 Old Turnpike Road, Nottingham, New Hampshire, received February 3, 2003. Your correspondence notifies the Department of the existence of a reportable condition in accordance with Env-Wm 1403.06 Notification of Groundwater Quality Violation. The Department understands that the reportable condition is based on information obtained from an initial transaction screen study performed on the subject property by Exeter Environmental Associates, Inc. on or about November 22, 2002.

In response to the findings presented in your correspondence, the Department requests the following:

1. Immediately submit all copies of all existing information concerning environmental conditions at the subject property.
2. Undertake a Site Investigation in accordance with Env-Wm 1403.07 Site Investigation. The Site Investigation must determine the location and full extent of contamination, identify all receptors and potential receptors, and based on the information, present recommendations for future actions as appropriate.
3. Submit a Scope of Work (SOW) and schedule for the Site Investigation within ten (10) days of your receipt of this correspondence.

Should you have any questions regarding the above, please do not hesitate to contact me at the Waste Management Division at (603) 271-3744 or by e-mail at jregan@des.state.nh.us.

Sincerely,

John Regan, P.G.
Supervisor, Hazardous Waste Remediation Bureau

H:\Admin\JRegan\200302008.Notification.doc
cc: Harry T. Stewart, P.E., Director DES/WD (via e-mail)
Fred McGarry, P.E., Chief Engineer, DES/WMD (via e-mail)
Richard Head, Esq., DOJ
Sarah Pillsbury, P.G., DES/WD
Karlee Kenison, P.G., DES/WMD (via e-mail)
Brandon Kernen, P.G., DES/WD
Ralph Wickson, P.G., DES/WMD (via e-mail)
David Reid, P.G., DES/WMD
Steven B. Shope, P.G., Exeter Environmental Associates, Inc.
Health Officer, Town of Nottingham
Gregory Smith, McLane, Graf. Raulerson & Middleton

Evans, Evans & Bingham
58 Main Street, Topsfield MA 01983
Tel: 978 887 2166 Fax: 978 887 3684

To: John Regan From: G. Shepard Bingham

Fax: 603-271-2456

Phone: Date: 2/6/03

Re: CC:

☐ Urgent ☐ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

• Comments:

EVANS, EVANS & BINGHAM
ATTORNEYS AT LAW

58 MAIN STREET, TOPSFIELD, MASSACHUSETTS 01983

WILLIAM G. EVANS
JOHN EVANS
G. SHEPARD BINGHAM
GARY E. EVANS

TELEPHONE (978) 887-2166
DANVERS (978) 774-5637
TELECOPIER (978) 887-3684

February 6, 2003

Mr. John Regan
Water Monitoring Division
New Hampshire Department of Environmental Services
P. O. Box 95
Concord, New Hampshire 03302-0095

VIA FAX: 603-271-2456

RE: K&B Realty trust
135 Old Turnpike Road, Nottingham, NH
DES# 200302008

Dear Mr. Regan:

In furtherance of the laboratory results and site sketch forwarded to your attention by facsimile transmission yesterday afternoon, following please find the results obtained from the first round of testing performed on DW-2,

Thank you.

Very truly yours,

G. Shepard Bingham, Esquire

GSB/hwf
regan-gsb
Enclosure

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 34453

Client: **Exeter Environmental Assoc., Inc.** Client Designation: **Harnum Rigging / EEA# 1433.01**

Sample ID:	DW-2
Analytical Type:	Sample
Matrix:	aqueous
Date Sampled:	12/23/02
Date Received:	12/23/02
Units:	ug/l
Date of Analysis:	12/30/02
Analyst:	JDS
Method:	524.2
Dilution Factor:	1

		STD
Dichlorodifluoromethane	< 0.5	
Chloromethane	< 0.5	
Vinyl chloride	**0.8**	2
Bromomethane	< 0.5	
Chloroethane	< 0.5	
Trichlorofluoromethane	< 0.5	
Diethyl Ether	< 5	
Acetone	< 5	
1,1-Dichloroethene	**250**	7
Methylene chloride	< 0.5	
Carbon disulfide	< 2	
Methyl-t-butyl ether(MTBE)	**9.5**	13
trans-1,2-Dichloroethene	< 0.5	
Vinyl acetate	< 10	
1,1-Dichloroethane	**260**	81
2,2-Dichloropropane	< 0.5	
cis-1,2-Dichloroethene	**5.7**	70
2-Butanone(MEK)	< 5	
Bromochloromethane	< 0.5	
Tetrahydrofuran(THF)	< 5	
Chloroform	< 0.5	
1,1,1-Trichloroethane	**76**	200
Carbon tetrachloride	< 0.5	
1,1-Dichloropropene	< 0.5	
Benzene	< 0.5	
1,2-Dichloroethane	**5.2**	5
Trichloroethene	**1.8**	5
1,2-Dichloropropane	< 0.5	
Dibromomethane	< 0.5	
Bromodichloromethane	< 0.5	
2-Chloroethylvinylether	< 2	
4-Methyl-2-pentanone(MIBK)	< 5	
cis-1,3-Dichloropropene	< 0.5	
Toluene	< 0.5	
trans-1,3-Dichloropropene	< 0.5	
1,1,2-Trichloroethane	< 0.5	
2-Hexanone	< 5	
Tetrachloroethene	**66**	5
1,3-Dichloropropane	< 0.5	
Dibromochloromethane	< 0.5	
1,2-Dibromoethane	< 0.5	

LABORATORY REPORT

Eastern Analytical, Inc. ID#: 34453

Client: **Exeter Environmental Assoc., Inc.** Client Designation: **Harnum Rigging / EEA# 1433.01**

Sample ID:	DW-2
Analytical Type:	Sample
Matrix:	aqueous
Date Sampled:	12/23/02
Date Received:	12/23/02
Units:	ug/l
Date of Analysis:	12/30/02
Analyst:	JDS
Method:	524.2
Dilution Factor:	1
Chlorobenzene	< 0.5
1,1,1,2-Tetrachloroethane	< 0.5
Ethylbenzene	< 0.5
m,p-Xylene	< 0.5
o-Xylene	< 0.5
Styrene	< 0.5
Bromoform	< 0.5
Iso-Propylbenzene	< 0.5
Bromobenzene	< 0.5
1,1,2,2-Tetrachloroethane	< 0.5
1,2,3-Trichloropropane	< 0.5
n-Propylbenzene	< 0.5
2-Chlorotoluene	< 0.5
4-Chlorotoluene	< 0.5
1,3,5-Trimethylbenzene	< 0.5
tert-Butylbenzene	< 0.5
1,2,4-Trimethylbenzene	< 0.5
sec-Butylbenzene	< 0.5
1,3-Dichlorobenzene	< 0.5
p-iscpropyltoluene	< 0.5
1,4-Dichlorobenzene	< 0.5
1,2-Dichlorobenzene	< 0.5
n-Butylbenzene	< 0.5
1,2-Dibromo-3-chloropropane	< 0.5
1,2,4-Trichlorobenzene	< 0.5
Hexachlorobutadiene	< 0.6
Naphthalene	< 0.5
1,2,3-Trichlorobenzene	< 0.5

Deviations from the Report:
DW-2 Parameter: 1,1-Dichloroethane Date of Analysis: 12/31/2002 Dilution Factor: 10

State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3644 FAX (603) 271-2181

March 10, 2003

Mr. G. Shepard Bingham, Esquire
Evans, Evans & Bingham
58 Main Street
Topsfield, MA 01983

RE: NOTTINGHAM – K&B Realty Trust, 155 Old Turnpike Road, Request for Schedule for Site Investigation (DES #200302008)

Dear Mr. Bingham:

The New Hampshire Department of Environmental Services (Department) has reviewed the Work Scope for a Site Investigation for the above referenced property prepared by Exeter Environmental Associates, Inc., on behalf of K&B Realty Trust, received February 15, 2003. The Work Scope was submitted in response to the Department's correspondence to Evans, Evans & Bingham dated February 5, 2003. In that correspondence, the Department requested both a Work Scope and a schedule for the Site Investigation. To date, we have not received the schedule. Therefore, the Department requests that the schedule for the Site Investigation be submitted within five (5) days of receipt of this correspondence.

Please address future correspondence regarding the site to my attention. Should you have any questions regarding the above, please contact me at the Waste Management Division at (603) 271-6572.

Sincerely,

Ralph Wickson

Ralph Wickson, P.G.
Waste Management Division

L:\HWRB\Admin\RWickson\200302008.Request.doc

cc: Richard Head, Esq., DOJ
Michael Wimsatt, P.G., WMD
Brandon Kernen, P.G., WD
Steven B. Shope, P.G., Exeter Environmental, Inc.
Health Officer, Town of Nottingham

COPY

EVANS, EVANS & BINGHAM
ATTORNEYS AT LAW

58 MAIN STREET, TOPSFIELD, MASSACHUSETTS 01983

WILLIAM G. EVANS
JOHN EVANS
G. SHEPARD BINGHAM
GARY E. EVANS

TELEPHONE (978) 887-2166
DANVERS (978) 774-5637
TELECOPIER (978) 887-3684

March 19, 2003

Ralph Wickson, P.G.
Wasate Management Division
N.H. Department of Environmental Services
6 Hazen Drive
P.O. Box 95
Concord, New Hampshire 03302-0095

RE: Nottingham – K&B Realty Trust
155 Old Turnpike Road
DES # 300202008

Dear Mr. Wickson:

In response to your letter of March 10, 2003 requesting a time line for implementation of the scope of work submitted pursuant to K&B's Site Investigation at the above-referenced premises, please be advised of the following.

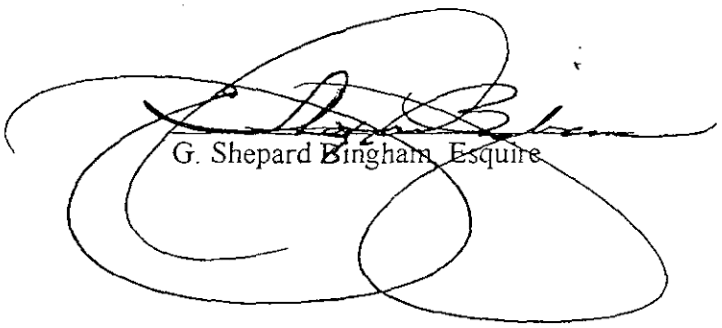
We were originally to have commenced a vertical survey of the water quality in DW-1 (current supply well) and DW-2 (discontinued water supply well) on March 5, 2003 via so-called "packer" testing. Unfortunately, the original subcontractor, Capital Well Co., Inc. of Dunbarton, N.H., developed mechanical problems and had to reschedule testing until March 17, 2003. On March 14, 2003, Capital advised us that while they were in the process of "shaking-down" their new equipment, the test well they were employing actually collapsed on the same and Capital once again needed to postpone.

In response, Exeter Environmental has hired a firm based in North Reading, Massachusetts to perform our packer tests. They are now scheduled to be on-site commencing March 20, 2003 until completion. Exeter has requested expedited results for all laboratory analyses.

Once we have obtained the lab results from our packer testing, I am hopeful that I can respond in a much more detailed fashion regarding a timetable for our remaining scope of work.

Thank you for your patience and continued cooperation.

Very truly yours,



G. Shepard Bingham, Esquire

GSB/hwf
Wicksonltr-gsb
Cc: Steven B. Shope, P.G.

COPY

EVANS, EVANS & BINGHAM
ATTORNEYS AT LAW

58 MAIN STREET, TOPSFIELD, MASSACHUSETTS 01983

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June 13, 2003

Ralph Wickson, P.G.
Waste Management Division
N.H. Department of Environmental Services
6 Hazen Drive
P.O. Box 95
Concord, New Hampshire 03302-0095

Richard Head, Esquire
Assistant N.H. Attorney General
Office of Attorney General
33 Capitol Street
Concord, New Hampshire 03301-6397

RE: K & B Realty Trust
Site Investigation Report
155 Old Turnpike Road, Nottingham, NH
DES File No.: 300202008

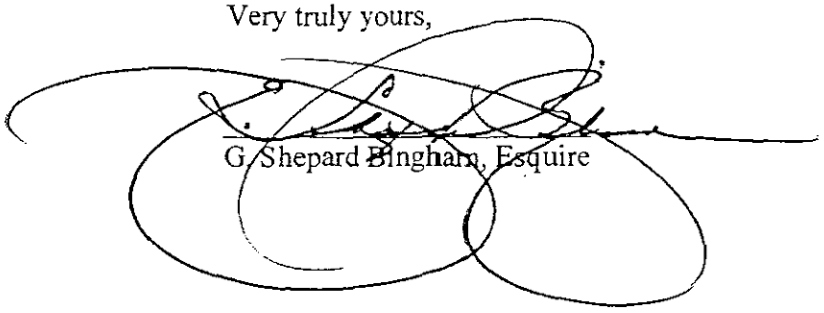
Gentlemen:

In response to our respective telephone discussions of this week, please allow this letter to constitute K & B Realty Trust's formal request for a sixty (60) day extension to complete its Site Investigation Report.

While a significant amount of data has been compiled to date, extensive soil vapor testing for source characterization is still ongoing. Furthermore, six (6) additional bedrock wells may be installed to validate our prior groundwater findings. In this regard, U.S.A. Springs, Inc. has been provided open access to our site in order to undertake whatever testing it deems necessary to its application process.

Thank you for your favorable action relative to this extension request.

Very truly yours,



G. Shepard Bingham, Esquire

GSB/hwf
a: wickson-gsb

State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3644 FAX (603) 271-2181

June 19, 2003

Attorney G. Shepard Bingham
Evans, Evans & Bingham
58 Main Street
Topsfield, MA 01983

RE: NOTTINGHAM - K&B Realty Trust, 155 Old Turnpike Road, Site Investigation Report (DES #200302008)

Dear Attorney Bingham:

The New Hampshire Department of Environmental Services (Department) is in receipt of your letter dated June 13, 2003 that formally requests a sixty (60) day extension to complete the Site Investigation Report (SIR) for the referenced site. As you are aware, the SIR was required to be submitted to the Department by June 3, 2003.

DISCUSSION

In order for the Department to act on this request, the following is required:

- Supporting rationale justifying the request for an extension.
- Written confirmation detailing the parties associated with the site investigation and their areas of responsibility.

This information should be submitted to this office within five days of your receipt of this correspondence.

Should you have any questions or require additional information, please contact me at the Waste Management Division at (603) 271-6572.

Sincerely,

Ralph Wickson, P.G.
Waste Management Division

L:\HWRB\Admin\RWickson\KB Request2.doc
cc: Harry Stewart, P.E., Director, WD
Michael Wimsatt, P.G., WMD (via e-mail)
Richard Head, Esq., NHDOJ
Board of Selectmen, Town of Nottingham
Board of Selectmen, Town of Barrington
Board of Selectmen, Town of Northwood
File

EVANS, EVANS & BINGHAM
ATTORNEYS AT LAW

58 MAIN STREET, TOPSFIELD, MASSACHUSETTS 01983

WILLIAM G. EVANS
JOHN EVANS
G. SHEPARD BINGHAM
GARY E. EVANS

TELEPHONE (978) 887-2166
DANVERS (978) 774-5637
TELECOPIER (978) 887-3684

COPY

June 24, 2003

Ralph Wickson, P.G.
Waste Management Division
N.H. Department of Environmental Services
6 Hazen Drive
P.O. Box 95
Concord, New Hampshire 03302-0095

RE: K&B Realty Trust
Site Investigation Report
155 Old Turnpike Road, Nottingham, NH
DES File No.: 300202008

Dear Mr. Wickson:

In response to your letter dated June 19, 2003 requesting supporting rationale sufficient to justify K & B Realty Trust's request to extend the Site Investigation Report submission date, let me respond as follows.

First, the speed and scope of our investigation at the Old Turnpike Road site has always been driven by the current availability of funds with which to undertake the same. As there are neither insurance proceeds nor any present revenue streams generated by the property providing the requisite funding for those tests, engineering fees, drilling costs, etc. incurred to date, the burden of moving forward with the same has fallen squarely on the individual shoulders of the Trust's two (2) beneficiaries. Neither is in a position to incur such cash outflows without substantial hardship.

It is the foregoing position which forced K & B Realty Trust to seek alternate outside funding from various third party sources who might be interested in joint venturing the future development of the property in consideration for their active financial participation in the present source characterization and site remediation efforts now underway. Ultimately, that search for funding resulted in the formation of a new entity, the Just Cause Realty Trust, which has recently acquired title to the property

subject to and with the clear obligation to complete all D.E.S. site investigation and remediation requirements.

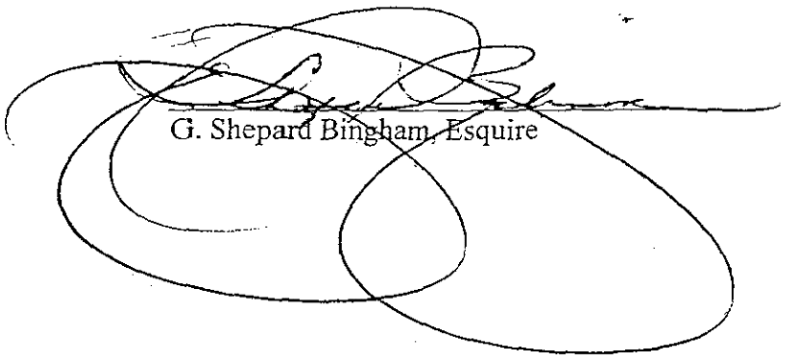
The above transfer represented an enormous loss for my client; however, it was the only means available to it which would bring to the table the continuing flow of cash necessary to complete the site investigation and remediation process.

At this juncture, all future correspondence regarding this matter should be directed to Joseph Fitzgibbons, Esquire, 126A Pleasant Valley Road, Methuen, MA 01844 (Tel: 978-685-3090) the current Trustee of Just Cause Realty Trust. In addition, Stephen B. Shope of Exeter Environmental is currently transitioning all of our data and draft reports to Just Cause's engineering team with the direction that they contact your office forthwith.

If I can be of any further assistance, please feel free to contact me.

Thank you.

Very truly yours,



G. Shepard Bingham, Esquire

GSB/hwf
wickson-gsb

State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES
NHDES
6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3644 FAX (603) 271-2181

June 26, 2003

Mr. Joseph Fitzgibbons, Esq.
Just Cause Realty Trust
126A Pleasant Valley Road
Methuen, MA 01844

RE: NOTTINGHAM – Former K&B Realty Property Site, 155 Old Turnpike Road (DES #200302008)

FORMAL APPROVAL TO EXTEND THE SUBMISSION DATE FOR THE SITE INVESTIGATION REPORT FOR THE PERIOD OF SIXTY (60) DAYS

Dear Attorney Fitzgibbons:

The New Hampshire Department of Environmental Services (Department) has been informed by Attorney G. Shepard Bingham (Evans, Evans & Bingham) in correspondence dated June 24, 2003 (attached) that you are the principal contact for the referenced site. Therefore, this correspondence is directed to your attention.

DISCUSSION

As you may be aware, on June 13, 2003 Attorney Bingham requested a sixty (60) day extension to complete the Site Investigation Report (SIR) for the referenced site. Attorney Bingham indicated the extension was necessary to complete the source investigation and installation of bedrock monitoring wells. The SIR was originally due to be submitted to the Department on June 3, 2003. Based on the information presented by Attorney Bingham in the June 24, 2003 correspondence, the Department has determined that extending the submission date for the SIR is appropriate. Therefore, the Department will require that the SIR be submitted to this office on or before August 25, 2003. Please provide a list of consultants working on this project and Scope of Work for each consultant within five (5) days of receipt of this correspondence.

Should you have any questions or require additional information, please contact me at the Waste Management Division at the letterhead address or by telephone at (603) 271-6572.

Sincerely,

Ralph Wickson

Ralph Wickson, P.G.
Waste Management Division

Attachment

L:\HWRB\Admin\RWickson\200302008.Extension.doc
cc: Harry T. Stewart, P.E., Director, DES/WD
Richard Head, Esq., DOJ
Michael Wimsatt, P.G., WMD (via e-mail)
G. Shepard Bingham, Esq., Evans, Evans & Bingham
Board of Selectmen, Town of Nottingham
Board of Selectmen, Town of Barrington
Board of Selectmen, Town of Northwood
File

Exhibit 3

Response to Preliminary Technical Comments from
New Hampshire Department of Environmental Services – April 11, 2003
USA Springs Final Permit Application Report Dated February 4, 2003

1.0 Conceptual Model

Env-Ws 388 and Env-Ws 389 both require the development, refinement, and presentation of a conceptual hydrogeologic model. The following comments are provided in this context:

1) 180-day Recharge Period: Executive Summary, page i (paragraph 1) states: "in particular, this rate can be sustained even if there were no contribution to groundwater from precipitation at all for six months, an event which almost never occurs in New Hampshire". This and other similar phrases in the report need to be revised to reflect typical natural conditions. In New Hampshire, water levels in all types of aquifers typically decline every year from the month of May through the month of October, because very little precipitation replenishes aquifers during this period (see data collected by the United States Geological Survey at http://nh.water.usgs.gov/Publications/annual01/ A8. gwlevels.pdf). The rate of decline varies, being greater during periods of drought and less during wet weather periods. As discussed below, in addition to changing the report language, the conceptual model needs to be fully calibrated to this 180-day no recharge period as required in Env-Ws 388.

Response: We acknowledge that in New Hampshire the net recharge rate to aquifers during the summer months can be small and can result in a decline in groundwater heads. Nonetheless, the 180-day no recharge analysis, required by Env-Ws 388 and presented in the permit application, is conservative since it assumes zero recharge for a six month period.

As discussed below and in Attachment I, precipitation adjustments were applied to groundwater elevation response data. The overall affect of these precipitation adjustments are minor and they do not change the overall conclusions.

2) Aquifer Storage/Source of Pumped Water: Executive Summary, page ii (paragraph 3), page 27 (paragraph 2) states: "Furthermore, although water available within storage will not be tapped due to the net water surplus....". Data from the report indicates that pumped water will be derived from both "recharge" and "storage" under virtually all conditions. During some time periods, such as the wet weather period when the withdrawal test occurred, the dominant source may be recharge with less pumped from storage than during "normal" conditions. However, the report data indicate that that the withdrawal test created a zone of influence (Figures 3-16, 3-17, and 3-18) and thus storage was evidently being tapped to some degree even under the November 2002 withdrawal test conditions, which were relatively wet. The report language should be revised to better reflect this storage/recharge relationship.

Response: These and other similar statements are based on the water budget analysis, which indicated a net water surplus on an annual average basis (Tables 3-9 and 3-10). Therefore, once equilibrium has been reached, under average long term conditions, storage will not be affected. In the short term, e.g., at start-up, during dry periods, etc. locally storage will be tapped, but not on a long term basis – the key measure for a proposed withdrawal.

3) Potentially Conflicting Elements of the Conceptual Model: The conceptual model describing the relationship between recharge in the shallow overburden and the bedrock aquifer needs to be more fully reconciled with the available data, and consistently developed and integrated. The report presents two conflicting conceptual models: (1) bedrock is vertically isolated from the surficial overburden and (2) bedrock is rapidly recharged by precipitation events so groundwater is not removed from local storage (i.e., bedrock wells are closely connected to the shallow overburden aquifer). Please correct the

conflicting conceptual models or provide a technical basis to explain the apparent conflict. Statements that reflect the conflict within conceptual models are presented below:

Statements consistent with bedrock isolation from surficial overburden

· On page 28, (paragraph 3), the report states "minimal response was noted in the shallow overburden deposits during the withdrawal test".

· On page 32- 33, the report suggests that bedrock is insulated or "vertically isolated" from events that occur on the surface that might cause contamination of the bedrock aquifer.

· On page 34 of the report, it is explained "the water bearing fractures at the USA wells, especially USA-1 and 2 are at considerable depths below ground surface (ranging from 525-560 feet and 450-465 feet at USA-1 and USA-2 respectively); thus the water bearing fractures are naturally isolated (or vertically distant) from groundwater quality impacts identified in shallow overburden and the upper portion of the bedrock aquifer."

Statements consistent with bedrock being closely connected to overburden

· On page 26, the report states: "In addition, antecedent groundwater elevation data collected for approximately 4 weeks at residential bedrock wells indicated a significant (average 2.9 feet) increase in groundwater heads. These data demonstrate that the bedrock aquifer: 1) receives significant recharge from precipitation; and 2) responds relatively quickly to recharge events."

· The report states on page 30, paragraph 3 that "groundwater elevations at the on-site overburden piezometer/wells responded significantly (up to 7.5 feet at OW-1) and quickly in response to precipitation events during the antecedent monitoring." OW-1 is screened in till, immediately above the bedrock aquifer.

· The data presented on page 31 indicate that the observed increases in peizometric head in bedrock fractures were an order of magnitude greater than the amount of precipitation received, suggesting direct recharge to bedrock from precipitation.

· Also on page 31, the report states that "bedrock receives significant recharge from precipitation and the effect of recharge events are manifested within the bedrock aquifer (within days)", indicating that the bedrock aquifer is closely connected to the surface.

· Monitoring wells NBW and OW-1 exhibited water level rises during the withdrawal test. This may suggest that precipitation directly recharges to bedrock.

· On page 23 of the report it is explained that "the dip of the primary fracture (NE-SW) was almost vertical (89o degree SE) consistent with one of the conclusions of the VLF survey." Vertical bedrock fractures could facilitate the direct connection of the deep bedrock aquifer with the shallow bedrock aquifer and possibly the overburden.

Response: The following will explain the conceptual site model elements. Data reviewed/collected during the Large Groundwater Withdrawal Permitting process for the Site clearly indicate that there is hydraulic communication between overburden and bedrock. The degree and magnitude of communication varies spatially and vertically depending on factors such as soil lithology, bedrock fracture orientation, etc.

Specifically, the statement on page 28 was simply reporting the withdrawal test results for the shallow overburden and not drawing any conclusions regarding the degree of communication between

overburden and bedrock. The other two statements were indicating that the USA series extraction wells tap deep bedrock fractures which in all likelihood obtain a small portion of their water from the area where volatile organic compounds have been detected. These statements are not inconsistent with the overall conceptual model.

4) Section 3.2.4, Page 11 – Step Drawdown Testing: A sentence should be added to this section describing the results of the step-drawdown testing conducted by Geosphere in 2001. This step-test demonstrated that the pumping of each well individually (USA-1, 2, and 4) affected the water level of the other two wells that were not pumping, and this information should be incorporated into the conceptual model. If you do not believe this information should be incorporated into the conceptual model, please provide a technical basis for such a conclusion.

Response: It is acknowledged that the results from the step-test conducted in 2001 showed a hydraulic connection between the USA series wells. The conceptual model has always acknowledged that there is some degree of inter-connected bedrock fractures that underlie the Site.

5) The report analysis states that deeper overburden wells show a greater response to pumping than shallower overburden wells (pages 28-29). However, there are other relationships that could develop this response. For instance, the precipitation effects on the deeper wells could be delayed relative to the shallow wells. Similarly, withdrawal test effects on the shallow overburden could be delayed relative to the deep wells. Please explain the relative impact hydraulic influences had on the water levels measured in the deep and shallow wells.

Response: Time-drawdown plots, adjusting for potential precipitation effects, are included in Attachment I. These plots use antecedent data collected at an ambient residential well (218 France Road) to account for precipitation effects at bedrock wells; similarly, location-specific antecedent data were used to account for precipitation effects at overburden monitoring wells. The overall impact of the precipitation adjustment is relatively minor, e.g., at most wells the predicted drawdown increased by approximately 0.5 to 3.0 feet for a 180 day no-recharge estimate, and does not affect the overall conclusions. Therefore, the conclusion that the deep overburden showed a greater response to pumping than the shallow overburden is appropriate.

6) Preliminary water quality results obtained after installing the wells and during the groundwater discharge permitting process should be included in the conceptual hydrogeologic model discussion, per Env-Ws 388.06(c)(1).

Response: The results from the preliminary water quality investigations are included in Attachment I. These results do not change the conceptual hydrogeologic model.

2.0 Groundwater Withdrawal Test Assessment

1) The adverse impact analysis for water resources and wetlands in the report is dependent on drawdown data collected during the withdrawal test, extrapolated to 180 days. The graphs of water levels presented in Appendix H and all figures estimating 180-day zone of influence in the bedrock and overburden aquifers, depict the actual observed water level measured prior to, and during, the withdrawal test. Therefore the extrapolation of drawdown data after 180 days of pumping include the effects of recharge that need to be calibrated "out" of the model. The report indicates that 1.79 inches of precipitation fell in the three days immediately prior to the test. Although some of the precipitation fell as snow and was not immediately available as recharge, melting during the test probably allowed significant infiltration of water into the ground. An additional 0.55 inches of precipitation fell during the 10-day test. As specific examples, evidence of the impacts of the recharge caused by the precipitation events include:

· The drawdown graphs in Appendix H which show water level increases in a number of on-site wells between 5000 and 6000 minutes after pumping began; and

· Water levels in off-site wells that were not apparently impacted by pumping generally showed a rise in water levels before and during the pumping test.

Env-Ws 379.11(e)(3)b.3 requires water level measurements in a background well outside the zone of influence (Env-Ws 379 governs withdrawal tests by references contained in both Env-Ws 388 and 389). This was done, but not documented or used to correct for precipitation effects. An example of where precipitation may have masked pumping-induced drawdown may be the New Barn Well (NBW). The report (page 28) predicted no response at the NBW, even though Geosphere's step tests indicated there was a response. The report's results for the NBW show no response due to pumping, as depicted on the arithmetic-scale graph of transducer data (Appendix H), but the vertical scale is not suitable and may have hidden a response. The semi-log plots for both manual and transducer data show apparent responses to both precipitation and pumping shutdown in NBW. The following additional specific issues need to be addressed:

· Data corrections are necessary to adjust for influences other than pumping including the precipitation, pipe leakage, and constantly changing weather conditions that occurred prior to, and during, the withdrawal test to reflect the 180-day no recharge requirement of Env-Ws 388 or 389.

· Temperature data and weather conditions need to be provided in the report as required by Env-Ws 379.

· Precipitation measured on site should be provided to comply with Env-Ws 379.11(e) 5 and 8. Precipitation data were obtained from a weather station in Durham, New Hampshire, approximately 7.5 miles away, according to the report, page 13.

· If you believe that no data corrections are necessary, please provide a technical explanation for this conclusion.

Response: Time-drawdown plots, adjusting for potential precipitation effects, are included in Attachment I. These plots use antecedent data collected at an ambient residential well (218 France Road) to account for precipitation effects at bedrock wells; similarly, location-specific antecedent data were used to account for precipitation effects at overburden monitoring wells. The overall impacts of the precipitation adjustment is relatively minor, e.g., at most wells the predicted drawdown increased by approximately 0.5 to 3.0 feet for a 180 day no-recharge estimate, and does not affect the overall conclusions. Note, electronic files presenting the details of the precipitation adjustment calculations are included on the attached CD-ROM.

Barometric pressure adjustments had already been made at all locations where pressure transducers were used to monitor groundwater elevations. Electronic files presenting the barometric pressure adjustment calculations are also included on the attached CD-ROM.

Groundwater elevation adjustments to account for leaks from the discharge pipe were not performed because the leak occurred in a relatively localized area and such effects would not affect the study's overall conclusions. In addition, the proposed future monitoring, specially near the extraction wells, where the leakage was most pronounced, is the most scientifically sound means to address this issue.

Daily temperature and weather data obtained from the UNH weather station located approximately 7.5 miles from the site and data from the on-Site precipitation gauge are attached (Attachment I).

2) The following tables in the report need to be revised to correct for precipitation and pipe leakage that occurred prior to and during withdrawal testing to meet the requirements of Env-Ws 379.15 as required by Env-Ws 388 and 389: Table 3-8, Table 4-1, Table 4-2 (section 2). If you do not believe any correction is necessary, please provide a technical basis for your conclusion.

Response: The above-referenced tables have been updated and are included in Attachment I and are also included on the attached CD-ROM. Groundwater elevation adjustments to account for minor pipe leakage were not performed because the leak occurred in a relatively localized area and such effects would not affect the study's overall conclusions. In addition, the proposed future monitoring, specially near the extraction wells, where the leakage was most pronounced, is the most scientifically sound means to address this issue.

3) The following figures in the report need to be revised to correct for precipitation and pipe leakage that occurred prior to and during withdrawal testing to meet the requirements of Env-Ws 379.11(e)(8)/Env-Ws 379.15: Figure 3-13, Figure 3-14, Figure 3-15, Figure 3-16, Figure 3-17, Figure 3-18, and Figure 3-19. The report should provide a summary table of water levels at the end of the pumping period. End-of-test figures analogous to Figures 3-13, 3-14, 3-16 and 3-18 should also be provided. If you do not believe any correction is necessary, please provide a technical basis for your conclusion.

Response: Report figures have been updated to account for the minor precipitation-related adjustments (attached). However, because a depiction of groundwater elevations assuming no recharge for 180-days is more conservative than a presentation of elevations recorded at the end of the test, only the former set of figures are presented.

4) Env-Ws 379.11(e)(8) requires that water level data be presented in tabular form. The table(s) must include appropriate corrections to the groundwater levels. In addition to data corrections for precipitation effects, because many of the wells monitored during the withdrawal test are constructed in semi-confined aquifers, correction for barometric efficiency is also appropriate. Further, depending upon the types of transducers used, barometric pressure variation effects on water level instrument reading may also be necessary if the pressure transducers were not vented. Both recorded and corrected water levels are to be plotted versus time, as spelled out in detail in Env-Ws 379.11(e)(8)c. If you do not believe any correction is necessary, please provide a technical basis for your conclusion.

Response: Barometric pressure and precipitation adjustment calculation details, both in tabular and graphical form, are included on the attached CD-ROM.

5) Env-Ws 379.11(e)(8) requires a table providing the horizontal distances between observation points and the pumping well(s). This has not been provided. The same regulation requires that drawdown be plotted versus the log of distance. This has not been included in the report and should be added for selected well profiles, especially west of the pumping wells. The plots should use measurements corrected for precipitation and other effects as described above. Both end-of-pumping test results and 180-day results should be considered.

Response: The approximate distance from the pumping wells (approximate center of cone of depression) to each residential bedrock well was previously provided in Table 3-1; the locations of the on-site observations points was depicted on Figure 3-3, a more accurate portrayal than a table, given that an accurate estimate of the distances from the center of the cone of depression (considering multiple pumping wells) to observation points cannot be readily developed.

A distance-drawdown plot for bedrock wells located along the east-west trending fracture where groundwater response was observed is presented in Attachment I. This plot shows that the 180-day no-recharge cone of depression caused by the extraction extends approximately 7,000 feet from the USA

wells along Old Turnpike Road. Minor updates to the Source Water Protection Figure (3-15) the anticipated zone of influence figure (3-13) have been updated to reflect these changes(Attachment I).

6) The zone of influence that has been delineated in Figure 3-13 and the wellhead protection area delineated in Figure 3-15 need to be revised. There does not appear to be a basis, or the basis is not clear, for the extent of the zone of influence provided in the report relative to all orientations of the site and the network of wells monitored during the withdrawal test. The network of wells did not extend in the northern, western, or southern direction of the site to a distance where no response to pumping was observed. As discussed above, analytical methods that establish a distance-drawdown relationship in preferential flow direction to the USA Springs pumping wells must be developed and applied to delineate the zone of influence. It is likely that the wellhead protection area presented in the report, that must be delineated in accordance with Env-Ws 389.15 (which references Env-Ws 379.17), will need to be expanded to the west. Note that outcrop #4 (Figure 3-1), located along Route 4 west of the site has approximately east-west fracturing.

Response: The observed response due to pumping exhibited strong anisotropy with drawdown primarily observed along an east-west trending fracture. The western extent of the zone of influence in the attached Figure 3-13 was developed using the distance-drawdown plot (attached). The north-south extents of the zone of the influence were inferred since the distance-drawdown approach is not valid along these directions given the anisotropic nature of the response. The eastern extent was inferred to be between Lincoln Drive and Wood Road based on the withdrawal test data.

7) Please provide comment and justification for the construction and method of monitoring flow in the Unnamed Creek located north of the site. DES is concerned that the construction and monitoring methodology may have produced erroneous stream discharge estimates during the high flow conditions that existed during the withdrawal test. Specifically, please comment on the following observations:

- The staff gage (yard stick) used to measure stage behind the weir was located in the nape (the sloping area of the water surface, where it converges to flow through the V), adjacent to the notch.
- The downstream sides of the notch were submerged, apparently preventing a free-flow condition.
- Numerous obstructions were present immediately upstream of the weirs including branches, tree roots, and, probably most importantly, the sand bags used in the construction.
- The weirs were leaking.

Response: As acknowledged on Page 16 of the report, the weirs provided an order of magnitude estimate of stream flow. However, due to the increase in flow observed after the weirs were installed, the weirs were unable to provide precise stream flow measurements. Regardless, other data collected during the withdrawal test clearly demonstrated that the proposed withdrawal will not adversely affect Barrington Prime Wetland #40, hence more precise weir data are not needed. In addition, data will be collected during the facility's operation to monitor the effect, if any, of the withdrawal on the prime wetland.

8) Please provide information that documents the accuracy of the meters used to measure the discharge volume from USA-1, USA-2, and USA-4. Env-Ws 379.11(e)(2)c stipulates that "the discharge rate from the test well shall be measured using a circular orifice weir or other device which provides measurements of equal precision." The withdrawal test used flow meters instead of orifice weirs, and the calibration certification for the meters had expired (Appendix H.9). When flow meters are used, it is common practice to allow for a secondary method to measure discharge rates at some point in the discharge line and/or to use orifice weirs to verify the accuracy of the flow meters. Appendix H.9 contains a letter describing the accuracy of the water meter used in the mobile treatment unit (a potential secondary measurement opportunity), but the report does not contain any flow recordings for this meter. Assuming that quantity of water pumped is tied to the degree of impact on domestic wells, wetlands, and contamination migration, greater confidence in the precision of the discharge measurements would be beneficial. For example, if a large groundwater withdrawal permit is issued, and it contains a series of pumping rate reductions stipulated as part of a response plan to adverse impacts, the reductions could be

selected with more confidence if there were greater confidence in the accuracy of the flow measurements made during the test.

Response: R.E. Prescott has informed us that the flow meters were within the manufacturer's calibration warranty period (see letter in Attachment I). In addition, the flow meter measurements were confirmed by manual measurements and also using measurements at the treatment trailer as summarized below:

November 23, 2002 at 1:29 PM:	*210 gpm*
November 25, 2002 at 11:00 AM:	*214 - 215 gpm*
November 27, 2002 at 2:40 PM:	*214.8 gpm*
November 28, 2002 at 11:15 AM:	*212.8 gpm*
November 28, 2002 at 11:25 AM:	*214.8 gpm (after repair of leaking discharge pipe)*
November 29, 2002 at 6:375 AM:	*214.8 gpm*

These data show a very good correlation with the totaled flows measured at each extraction well during the test (Appendix H.1).

9) Env-Ws 379.11(e)(2)e requires that the "test well shall be pumped at a single, constant rate", but does not specify a tolerance limit. After installing the new meter on USA-1 on 11/22/02, no interruptions were recorded, and all three wells had constant "target rates" for the rest of the test. However, significant (>10%) fluctuations relative to the target rates are noted in Appendix H.1. Presentation of average pumping rates (and deviations) for each well for the last 7 days of the test would be instructive, as would a discussion of the effects (or lack) of the discharge deviations on the key interpretations for the analysis.

Response: Over the final seven days of the withdrawal test, groundwater was extracted from USA-1 at an average rate of 74 gpm with a standard deviation of 9 gpm, from USA-2 at an average rate of 125 gpm with a standard deviation of 4 gpm, and from USA-3 at an average rate of 16 gpm with a standard deviation of 4 gpm. Given the relatively small magnitude of the deviations and that the deviations were short term (on the order of a few hours), these deviations had a minimal impact on the test results.

10) Report Page 13, Section 3.2.6: Please provide the results of the on-site precipitation measurements, daily log of site activities, and log of weather conditions as required by Env-Ws 379.11(e)(5) and (8).

Response: The on-Site precipitation measurements, and the log of the weather conditions is provided in Attachment I. The daily log of key activities relating to the extraction wells was provided in Appendix H.1 of the February 3rd, 2003 Large Groundwater Withdrawal Application Report.

11) In accordance with Env-Ws 389.11(f), describe all procedures for collecting water quality samples from the monitoring wells. This information should include at a minimum, a description of equipment and methods used to purge and collect water samples, volume of water purged from each monitoring well, water level measurements, and the data describing the water quality parameters and water level measurements that were obtained during the sampling and the purging of water from each monitoring well. Chain-of-custody forms must also accompany all laboratory reports.

Response: Aries collected the site groundwater samples in general accordance with EPA sampling protocols. Prior to collecting overburden and bedrock monitoring and piezometer well groundwater samples, Aries purged approximately three well volumes of groundwater from each monitoring well using a dedicated disposable bailer, peristaltic pump or inertial hand pump (Waterra ™). Key hydrologic and water quality observations recorded during the test have all been time referenced and were included in Appendix H of the Large Groundwater Withdrawal Application Report. Electronic copies of all tabulated data has been included on the attached CR-ROM. Chain of custody forms are also included in Attachment III.

During collection of the water supply samples, Aries ran water at the tap for a minimum of 10 minutes prior to collecting each sample.

Surface water samples were collected directly from the reported surface water bodies. Samples collected for dissolved metals analyses were filtered in the field using 0.45 micron disposable filters.

All samples collected were preserved in the field consistent with EPA sampling protocols.

12) Appendix G of the report contains the analytical results of soil sampling. Provide the rationale for this sampling, and please describe the methods that were utilized to collect the soil samples.

Response: Aires Engineering, Inc. collected three near-surface soil samples from a low-lying area located hydraulically down-gradient and downstream of the adjacent property on December 13th, 2002. The objective of these field investigations was to assess near-surface soil samples for the presence of chlorinated organic compounds previously detected in groundwater samples from the nearby monitoring well OW-1.

The soil samples were collected using a pre-cleaned, stainless steel hand auger at depths ranging between 0.5 feet below ground surface to 1.0 feet below ground surface. Soil sample S-3 was collected from a low-lying area approximately 20 feet southeast of the adjacent property bedrock water supply well. Soil samples S-5 and S-6 were collected from low-lying areas approximately 10 - 20 feet downstream of an apparent storm drain outfall located on the adjacent property boundary in the vicinity of monitoring well OW-4. All soil samples were collected using methanol field preservation techniques consistent with NHDES March 2000, Final Policy – Preservation of VOCs in Soil Samples 9PA Method 5035. The hand auger was decontaminated with an alconox scrub, distilled water rinse, methanol rinse, and a final distilled water rinse after each sample was collected.

13) In the water level graphs presented in Appendix H, some manual water level measurements are inconsistent with the measurements collected by the pressure transducer (see graphs for PS-2S, PS-4S, PS-8S for examples). All measurement discrepancies must be explained so it can be determined what measurements should be considered accurate. Also, all corrections or adjustments applied to measurements must be identified and described.

Response: There are only two locations where discrepancies between manual measurements and transducer measurements were noted. At PS-2S, it is believed that the pressure transducer measurements are more accurate than the manual measurements. It is possible that debris or mud in the piezometer might have caused inaccurate readings when the manual measurements were collected. At PS-4S, it is believed that the manual measurements are more accurate than the pressure transducer measurements. It appears that this transducer had a mechanical malfunction.

No discrepancy was noted at PS-8S because only manual measurements were collected at this location.

3.0 Wetland Impact Assessment

1) Page iv (paragraph 6) states "Minimal drawdown being observed in the shallow overburden deposits (on the order of 2 feet)...". Two feet of drawdown in the shallow overburden may be significant. The lowering of shallow water by two feet may dewater submerged wetlands or lower the water table below the root zone of wetland vegetation, thus adversely impacting natural resources and causing adverse impacts to occur as described by Env-Ws 388.18(c)(6) and (7);

Response: The degree of response on wetlands vegetation, if any, due to lowering of groundwater heads depends on numerous factors, such as soil type, plant type, etc. The proposed future wetland-related

monitoring, which includes wetlands within the zone of influence and a control wetland (i.e., outside the zone of influence), is the most scientifically-sound means of evaluating the significance of any groundwater elevation response on wetland vegetation, if any.

2) Typically during a withdrawal test, if a groundwater withdrawal is deriving water from wetlands, drawdowns on the order of 0.1 feet are observed in wetland monitoring points. The water level data presented in the report plot water levels on a graph with water level elevation or drawdown shown on the y-axis. However, the y-axis has a range that exceeds the actual fluctuation of water levels by one or two orders of magnitude, making it very difficult and in some cases impossible to determine if a shallow well responded to the pumping of the wells at USA Springs. Please provide this information on a smaller scale that facilitates observations of fluctuations that may be significant.

Response: All electronic data files are included on the attached CD-ROM providing reviewers the flexibility to alter the graphical x- and y-axis scales, as necessary.

3) Leakage in the discharge pipe occurred during the withdrawal test. Therefore water levels obtained from P-3S, P-3D, PS-3S, PS-3D, P-2S, P-2D and P-2S may have been affected. The occurrence of the leakage should be described qualitatively and quantitatively. Corrections to measurements must be applied in accordance with by Env-Ws 379.11(e)(7) and (8). If you do not believe any correction is necessary, please provide a technical basis for your conclusion.

Groundwater elevation adjustments to account for leaks from the discharge pipe were not performed because the leak occurred in a relatively localized area and such effects would not affect the study's overall conclusions. The proposed future monitoring, specially near the extraction wells, where the leakage was most pronounced, is the most scientifically sound means to address this issue.

4) As discussed in Section 1 and 2 above, rain, snow and temperature fluctuations may have an effect on water levels during the withdrawal test. Measurements obtained from monitoring points located in the shallow overburden and surface water bodies also appear to be impacted by weather trends (see water level elevations measured during the antecedent and pumping periods for OW-1, DP-1S, PS-2S, PS-3S, PS-4S, PS-8S, PS-9S, P-1S, P-1D, P-2S, P-2D, P-3S, P-4S, P-4D, P-5S, P-5D, P-6S, P-6D, P-8S, P-8D, P-9S, and P-9D). Therefore, the report should contain a monitoring, reporting, and mitigation program prepared in accordance with Env-Ws 388.20 and 388.21 to compensate for insufficient and incomplete data that exists to complete an adverse impact assessment in accordance with Env-Ws 388.20(a)(1). The monitoring, reporting, and mitigation program presented in Section 4.2.3 of the report is very limited in scope, and only monitors the prime wetland immediately adjacent to the site. A monitoring, reporting, and mitigation plan must be developed and implemented that protects the functions and values for all wetlands within a zone of influence that is delineated in accordance with Env-Ws 388.09(a), Env-Ws 388.06(h) or Env-Ws 379.11(e)(8) in order to ensure that adverse impacts as defined by Env-Ws 388.18(c)(7) do not occur.

Response: An expanded wetland monitoring, reporting, and mitigation plan is attached (Attachment II).

5) Please provide a measurement of representative resources and uses such that the data can be used to estimate the effects on all resources and users that might be adversely impacted as required by Env-Ws 388.09(d). There is no analysis or figure that reconciles the withdrawal monitoring network with the water resource and use inventory prepared in accordance with Env-Ws 388.15.

Response: The resources and users at the Site that may be impacted by the withdrawal are residential well owners and wetlands. Figure 3-1 and Appendix D of the report summarize the monitoring that was performed to assess impacts to each of these resources and uses. The long term monitoring plan (Attachment II) presents a plan to monitor impacts, if any, after start-up to both residential well owners and wetlands.

6) The report includes the statement that "potential loss in groundwater discharge to the on-site Beaver Pond (BPW40) is insignificant compared to the storage in the Pond and the flow rate observed in the Unnamed Creek during the test" (page 38). The report's wetland leakage analysis estimates the amount of upward flow from shallow overburden to the wetland under non-pumping conditions, and it also estimates the amount of downward flow from the wetlands to shallow overburden after 180 days of pumping with no recharge. The report's analysis then combines these two results to obtain the "total difference in leakage" (Table 4-2) of 0.16 cu. ft./min.

The report presents limited data characterizing the geologic deposits beneath BPW40. The drilling and boring logs in Appendix E contain geologic information for one point (DP-1) in BPW 40. This log indicates only that 4 feet of muck (loose, wet, brown, suspended fine organic material with sticks) is underlain by 3.5 feet of "wetland deposits" that were not sampled or described. With this limited information, the magnitude of leakage that would occur in response to head differences between the wetlands and the shallow overburden cannot be accurately predicted. Please comment on the following issues:

a) Explain how unknown variations in the thickness of sediments underlying the wetland were accounted for in your analysis;

Response: Additional soil lithologic data collected by a wetland scientist have confirmed that the wetland bed thickness value used in the leakage calculation is appropriate (Attachment I). Since the wetland bed thickness value used has been confirmed by additional data and the value used (3 ft) is conservative, no additional analyses are required. Furthermore, as discussed above, the proposed wetland monitoring is the most scientifically sound technique for addressing such issues.

b) Explain how the heterogeneity and occurrence of preferential pathways in the sediments underlying the wetlands were accounted for in your analysis;

Response: The approach we used to analyze wetland leakage is a standard and routinely used approach for undertaking such evaluations. The effect of heterogeneities and preferential pathways, if any, is best addressed by the proposed wetland monitoring.

c) Explain further how the method for estimating the hydraulic conductivity of the sediments underlying the beaver pond was correlated with the physical properties of the actual sediments. The vertical hydraulic conductivity value used in the calculations is taken from a single tri-axial permeability test on a sample collected from OW-1D, located outside of wetlands and more than 1000 feet away from BPW40. The report acknowledges (page 39) the discrepancy, but states that the vertical permeability result "is conservative because the fine-grained, organic-rich wetland/pond deposits are expected to have a lower vertical conductivity";

Response: Given the lithology of the wetland bed deposits (fine-grained, organic-rich), these soils are expected to have a lower vertical conductivity than the value measured using the tri-axial test. Furthermore, the piezometers installed near the prime wetland (PS-4S, PS-5S, PS-7S, and PS-9S) also demonstrated a relatively small response in groundwater elevations during the antecedent and post withdrawal test monitoring indicating that the hydraulic conductivity of the deposits near/underlying the wetlands is lower than the till deposits that were tested using the tri-axial test .

d) Explain why the water levels used to estimate vertical gradient were not corrected to adjust for recharge from precipitation that occurred immediately prior to and during the withdrawal test;

Response: Applying precipitation adjustment had a minimal effect on the overall calculation – net difference in leakage changed to 0.20 from 0.16 ft^3/min.

e) Explain whether the results of water level monitoring at DP-1S may suggest that the beaver pond acts as a boundary condition, given that the water level in the shallow subsurface equilibrates with the water level of the beaver pond during withdrawal testing;

Response: Acknowledged – this is a possibility.

f) Explain why the leakage analysis was limited to only 50,000 ft2 of the pond bottom given that:

i) The zone of influence of analysis did not correct for precipitation that occurred prior to or during the withdrawal test; and

ii) The water level monitoring network consisted of driven monitoring points in and around the wetland. Therefore, the soils underlying the adjacent prime wetlands (BPW40) were not directly characterized so the vertical placement of the piezometer screens does not have a well-supported technical basis; and

Response: As explained in the report (Page 39), a value of 50,000 ft^2 was used since response due to pumping (during the test) was limited to PS-7S and PS-9S. As indicated in Attachment I, accounting for precipitation has a minimal effect on this analysis.

g) Explain why the wetlands leakage analysis (pages 38–40 and Table 4-2) was not corrected to dry weather conditions from the relatively high flows and surface water levels that existed during the withdrawal test.

Response: Such an analysis would be based on a number of assumptions (e.g. groundwater elevations near wetlands during dry conditions, pond conditions during dry conditions, etc.) and hence would not be reliable. We believe that the proposed groundwater elevation and wetland monitoring is a better way of evaluating and addressing dry weather condition effects. The applicant is fully aware that during prolonged dry periods, based on groundwater and wetland monitoring data, the withdrawal rate might have to be lowered for short time periods. This is reflected in the proposed mitigation plan.

7) The report provides a description of the soils underlying the on-site beaver pond on page 22. However, with the exception of the boring log associated with the installation of monitoring point DP-1S which did not directly assess the properties of the soils underlying the wetland, no detailed information is provided regarding the subsurface investigation conducted by the certified wetland scientist. This information is required to determine the basis for the conclusion that "the pond bottom reduces the degree of hydraulic communication between the Beaver Pond and underlying aquifer."

Response: Additional soil lithologic data are included in Attachment I. These data are consistent with prior lithologic data and support the prior conclusions.

8) The report's conclusion that the leakage rate will be reduced by 0.16 cu. ft./min on page 38 may be simplistic. Based on the calculations provided, there is not just a reduction in upward leakage but an elimination of the upward vertical gradient that might drive groundwater discharge to the wetland under non-pumping conditions. If this is the case, pumping the USA Springs wells may cause groundwater discharge to the wetlands to cease even under the relatively high water conditions prevalent during the pumping test.

Response: Given the size of the wetland, the minimal aerial extent in groundwater head response observed near the wetland, and the large contribution area for the wetland, no adverse effects are anticipated at the prime wetland. Furthermore, the proposed monitoring plan will be used to evaluate the effects of the withdrawal and make extraction rate adjustments, as necessary.

9) The analyses on page 38 of the report explains "the loss in the wetland leakage rate (0.16 ft3/min) is only 0.15% to approximately 1% of the stream flow observed in the Unnamed Creek during the withdrawal test (13.7 to 109.6 ft3/min)". On page 39 of the report, it is explained that leakage rate analysis suggests that only 3% of the pond volume will be reduced due to pumping if it did not rain for 2 months. This analysis does not take into a account the recharge issues raised above. For the reasons described above, please correct for precipitation recharge in you analysis. If you do not believe any correction is necessary, please provide a technical basis for your conclusion.

Response: Refer to Attachment I; applying the precipitation adjustment has a minimal affect and the overall conclusions are valid.

On page 40 of the report, it is concluded that "both the large flow volume in the Unnamed Creek and the large storage of the pond are expected to minimize any potential effect of the proposed withdrawal on the wetland system and pond." The conclusion that pond storage will help minimize pumping effects implies that USA Springs believes that infiltration of water from the pond may occur during pumping. The report does not discuss the effect that pumping the wells during a time of reduced (or even zero) flows in the Unnamed Creek would have on the amount of water in the pond. If stream flow were reduced or eliminated, and if groundwater discharge to the wetland ceased, the pond would lose storage due to evaporation, surface water outflow, and possible infiltration into the ground under pumping stress. These potential wetland effects are not assessed in the report. The water budget also does not incorporate the loss of water to evapotranspiration, as well as the issues described in Comments 6-8, above.

Response: The water budget accounts for losses due to evapotranspiration in the recharge term implicitly (Page 30). The potential withdrawal related effects listed in the above comment are best addressed by the proposed monitoring.

10) The following statement is made on page 39 of the report:: "The use of the water level measured during the test within the Pond prior to the test to calculate leakage under 180-day no-recharge conditions is conservative since during such conditions the Pond level is likely to be somewhat lower, hence resulting in a smaller gradient and a smaller leakage rate". This analysis does not appear to take into account several factors. Whether the pond is contributing water to, or receiving water from, groundwater is dependant on seasonal conditions. During periods of low recharge and the vegetative growing season, it is likely that the water level of the underlying deposits will also be lower, meaning that the vertical gradient could actually be larger and reversed in the downward direction under low-flow conditions. The water level used to calculate the vertical gradient between the pond and the overburden aquifer does not account for this, because it has not been corrected for the effects of precipitation. Also, as presented, with the same head in groundwater in the shallow overburden, lower surface water level would result in a greater, not a smaller, vertical upward gradient. In this case, possibly more drawdown of shallow groundwater would occur before groundwater and surface water in the wetlands reached equilibrium.

Response: Such an analysis would be based on a number of assumptions (e.g. groundwater elevations near wetlands during dry conditions, pond conditions during dry conditions, etc.) and hence would not be reliable. We believe that the proposed groundwater elevation and wetland monitoring is a better way of evaluating and addressing dry weather condition effects. The applicant is fully aware that during prolonged dry periods, based on groundwater and wetland monitoring data, the withdrawal rate might have to be lowered for short time periods. This is reflected in the proposed mitigation plan.

11) Selected surface water information is illustrated in the "Surface Water Elevations" graph in Appendix H. This graph shows that prior to the pumping test, groundwater levels in shallow overburden (DP-1 interior) are greater than surface water levels in BPW40 (DP-1 outside and SG-1). This illustrates the upward head gradient that existed prior to pumping. After one day of pumping (11/20/02), groundwater and surface water levels were nearly coincident throughout the remainder of the test. Thus,

the upward gradient was eliminated, and an equilibrium condition was apparently established. One possible interpretation of these data is that under pumping conditions, water is drawn toward the pumping wells from the shallow overburden in the vicinity of BPW40; once the upward gradient is eliminated, induced infiltration from the wetland may occur. The wetland may be acting as a hydrogeologic recharge boundary during pumping conditions. The report should assess this possibility and the consequences for the wetland during dry conditions. If you disagree, please explain your analysis.

Response: Acknowledged. See response to comment 6 g) above.

12) The information presented in page 40 of the report supports USA Springs' observation that there was no response noted in overburden deposits near Nottingham Critical Wetlands (CI)/Barrington Prime Wetlands #39 and Barrington Prime Wetlands #10. This conclusion is logically extended to "far-field wetlands located within the Study Area." As discussed above, please either provide an analysis that corrects for precipitation and in the context of a conceptual model that anticipates drought conditions as defined in the rules. If you do not believe data corrections are necessary, please provide a technical basis for this conclusion. Also, the report extends the observations for these two wetlands to make the conclusion that "there will be no adverse impacts to any far-field wetlands located within the Study Area." Similarly, the potential impacts to these wetlands need to be discussed for dry conditions for those wetlands that may overlie certain bedrock fracture zones (and thus experience preferential drawdowns). Also, PS-2S, located near a small wetland near pumping well USA-2, showed a slight response (rise in water level) at the time of pumping shutdown that needs to be discussed and considered (see graph in Appendix H).

Response: Refer to Attachment I; applying the precipitation adjustment has a minimal affect and the overall conclusions are valid. Any withdrawal related effects are first/most likely expected to be manifested at/near the Site. Therefore, the proposed monitoring plan with a heavy emphasis at/near the Site is appropriate. Monitoring data from these locations will be used to determine the need to modify the scope of the monitoring program, as necessary.

13) Appendix D – This section of the report needs to be updated to include the following:

a) Table 1 which is referenced on page 1, paragraph 2, but is not included in the appendix;

Response: Table is attached (Attachment I).

b) A revision of this section to reflect the zone of influence that was delineated in accordance with the requirements of Env-Ws 388.09(a), Env-Ws 388.06 and Env-Ws 379.11(e)(8);

Response: A revised figure showing the zone of influence and the wetlands (within and beyond the zone of influence) is included. No other revisions are needed since all wetlands in the delineated zone of influence were already identified and evaluated.

c) A figure showing the location of onsite wetlands that are described in Attachment C; and

Response: This figure was provided to NHDES during the pump test planning process.

d) A summary of how the requirements of Env-Ws 388.09(d) were complied with.

Response: The proposed wetland monitoring (Attachment II) addresses this.

4.0 Effects on Current Water Users

1) All analyses presented in the report must be revised as described in Section 1 of this document. All graphs depicting water level measurements should be constructed on an appropriate (i.e., small) scale so that subtle trends can be reasonably identified.

Response: As discussed with NHDES, electronic files are provided on the attached CD-ROM, thus enabling reviewers to modify the x- and y-axis scales as necessary.

2) The dewatering of the water column by a factor of only 10% (page 35) may result in the dewatering of a primary water bearing fracture that supplies water to the well, and, as a result, an alternative water supply may have to be provided to these water users.

Response: Acknowledged. See response to section 7.0 comments (below).

3) Simply lowering a pump intake of a well as described on page 35 to mitigate an impact may not be adequate. Loss in head within the water column of the well casing may cause a well pump to fail, and a new more powerful pump may need to be installed to off-set head losses caused by the pumping at USA Springs.

Response: Acknowledged. See response to section 7.0 comments (below).

4) The report states "there is no current evidence that suggests that adverse impacts will occur, similar minor mitigation steps (i.e. – lowering the pump) might be required at very few other private wells"(page 35). Please identify which area and wells USA Springs is referring to. Because impacts were observed at the edge of the monitoring network in the easterly direction, how will impacts be identified and addressed in accordance with Env-Ws 388.09(a) and (d) or Env-Ws 388.20 (a) and (b)?

Response: Adverse impacts could potentially occur in residential wells located east of the Site. Monitoring will be performed at 8 residential locations in this direction within the anticipated cone of influence. See response to section 7.0 comments.

5) Projected 180-day drawdown results (Table 4-1) show that four of the domestic wells monitored would experience a drawdown greater than or equal to 10% of the available water column under high recharge conditions. All of these wells (Brett and Stephanie Gillespie, Irene Gillespie, James Page, Jr. and John Pierce) are located along Rt. 4 (Old Turnpike Road), west of the USA Springs site (Figure 3-13). The Brett and Stephanie Gillespie well has a projected drawdown of 61 feet, and the Page well shows a projected drawdown of 39 feet and is more than 3000 feet away from the nearest USA Springs pumping well. Additional wells in this vicinity have projected drawdowns that are greater than 5% of the water column. Other wells in the area were not monitored during the test, and some of these may also experience significant drawdowns during USA Springs' pumping.

Of the four wells with greater than 10% projected drawdown, none has a Well Completion Report in Appendix C, and Appendix C contains a questionnaire only for the Pierce well. This questionnaire indicates that a new pump motor was installed in March 2002, but does not provide pump depth or other information. The report asserts (page 35) that "anticipated depth of pump intakes (is) expected to be ... at sixty to seventy-five percent of the well depth", but provides no evidence. The report predicts "no loss of available water to the users of these wells." Based on the data presented, this assertion has not been justified.

Response: Well construction and other operational information (e.g. pump intake elevation) will be obtained prior to withdrawal start-up. In addition, monitoring will be performed at all residential wells located west of the Site that were monitored during the withdrawal test to verify these assumptions and conclusions of the pump test. See Attachment II for the proposed monitoring plan.

5.0 Water Quality

1) Report Page 12, Section 3.2.5: Significant findings regarding the results of the Pre-Withdrawal Test Water Quality Monitoring should be described. For example, Radium 226+228 exceeded drinking water standards set forth by Env-Ws 315.60 in the sampling conducted in October 2002, but is well below these standards in samples collected in November 2002. These results should be assessed to determine if groundwater derived from USA-1, USA-2 and USA-4 will require treatment to continuously meet safe drinking water standards to meet the objectives of Env-Ws 389.11(b).

Response: Since the data collected at end of the 10-day pump test are expected to be more representative of groundwater quality once the withdrawal facility begins operations than data obtained after short-term purging, it appears that treatment to address naturally occurring radium is not likely. Additional sampling will be undertaken in the future to determine whether groundwater treatment is required to address this issue.

2) The majority of the results of water quality sampling conducted in September 2000 and October 2002 indicate that groundwater obtained from USA Springs' wells exhibit elevated concentrations of iron and manganese, and often above the secondary water quality standards set forth by Env-Ws 319. The results of the water quality sampling conducted in November 2002 continue to show elevated concentrations of manganese, but this sampling event indicated that there are low concentrations of iron in the groundwater derived from USA Springs' wells. Based upon the conflicting sampling results, it is unclear if groundwater derived from USA Springs' wells may exceed secondary water quality standards. Please provide an analysis that: 1) Describes reason for the changes in water quality derived from the production wells; and 2) Assesses if water derived from the wells may require treatment for iron to continuously meet secondary drinking water standards.

Response: Relatively limited purging was undertaken as part of the previous rounds of groundwater quality sampling compared to the volume of water withdrawn as part of the pump test. This is probably the most significant factor affecting the groundwater quality (for iron). Based on the groundwater quality data obtained at the end of the pump test, no treatment for iron is likely to be needed. However, this issue will need further sampling and evaluation to ensure that the extracted water can continuously meet secondary drinking water standards.

3) Report Page 37, Paragraph 1: Please submit the calibration logs for the field equipment that were used to collect the field water quality measurements.

Response: Calibration logs are included in Attachment III.

4) The last two lab reports in Appendix G (samples 75790 and 75791) both are labeled as collected from well OW-1, but show very different results. Please provide an explanation that explains this discrepancy.

Response: The first lab report presented (75790) was an analysis of total metals in the sample. The second lab report presented (75791) was an analysis of dissolved metals in the sample.

6.0 Miscellaneous

1) Report Page 7, Paragraph 4: The Study Area delineated pursuant to Env-Ws 388.06 and 388.14 includes the Town of Northwood and a public water system in Barrington, in addition to the Town of Nottingham and Barrington which were included in the original study area delineation. It is DES's understanding that these entities have not been notified of the proposed withdrawal in accordance with

Env-Ws 485-C. Because USA Springs has significantly revised the proposed study area included in the initial submission dated May 2001, Public Notification of the major permit application to municipalities and public water suppliers that were not previously notified, but located within the revised study area, must be completed in accordance with RSA 485-C:14. Specifically, the Town of Northwood and the public water system at the Barrington Home Estates have not received notification in accordance with RSA 485-C:14.

Response: RSA 485-C:14-a states that notification must be provided to the municipality in which the large groundwater extraction wells are located "and to the governing bodies of each municipality and each supplier of water within the anticipated zone of contribution to the well." Because neither the anticipated zone of influence nor the Source Water Protection Area (the only two areas that could possibly be construed as a zone of contribution) extend into Northwood or to the public water supplier in Barrington (Barrington Home Estates), notification to these institutions is not required. Env-Ws 388 requires only that a copy of the large groundwater withdrawal report be submitted to all municipalities located within the study area.

2) Report Page 11, Section 3.2.3: Figure 3-8, not Figure 3-2, presents a weighted histogram of the bedrock fracture trends.

Response: Acknowledged.

3) Demonstration of Need/Water Efficiency – Env-Ws 485-C requires that an applicant demonstrate a need for a proposed withdrawal. The report requests a permitted withdrawal volume that appears to exceed the volume of water that can be trucked off-site based upon local zoning. The report does not address local zoning restrictions on trucking, but rather points to the consumer demand for bottled water as a basis of need. State law (RSA 485-C:4, XII, b) relates the "Demonstration of Need" specifically to implementing water conservation techniques when developing a new large groundwater withdrawal. Please reconcile site trucking limitations with the requested withdrawal volume or otherwise describe how the requested withdrawal amount will be efficiently used.

Response: Trucks that are permitted to carry up to 99,000 lbs gross vehicle weight will be used to transport the bottled water. The use of these trucks will enable operation of the plant in compliance with the local zoning requirements.

7.0 Future Monitoring, Reporting and Mitigation Requirements

On page 41 of the report, it is explained that the objective of the proposed future monitoring and reporting program is to: "1) Confirm the conclusions reached on the basis of the withdrawal test; 2) Ensure that the operation of the proposed withdrawal does not have any adverse impacts on current water users or wetlands; and 3) Collect data needed to make necessary operational changes." An additional objective of the future monitoring and reporting program must be to address the condition described by Env-Ws 388.20(a)(1). This regulation describes the need to conduct ongoing monitoring upon operating a withdrawal when withdrawal testing data is not sufficient to verify that adverse impacts from a large withdrawal will not occur. Although the withdrawal test included a substantial number of monitoring points, much of the response observed from shallow overburden and surface water monitoring locations was dominated by very high precipitation and highly variable climatic conditions. These influences caused the water level in the shallow monitoring wells to rise at an order of magnitude higher than the typical range of drawdown that is caused by a ten day withdrawal test. This means that even when corrections for precipitation are applied, it is most likely that much of the wetland environmental monitoring data will be ambiguous. Furthermore, the residential monitoring well network did not extend far enough in the westerly direction and the report acknowledges on page 35 that "similar minor mitigation steps might be required at very few other private wells located within the SWP that were not monitored during the withdrawal test."

The future monitoring program needs to include provisions to address the data collection inadequacies of the withdrawal test. Accordingly, the scope and intensity of the proposed future monitoring program must be to ensure adverse impacts will not occur to water resources or users identified by Env-Ws 388.07(d) and (e) and 388.15 as required by Env-Ws 388.20. The future monitoring program must include the monitoring of representative sites in accordance with Env-Ws 388.20(b) to meet the objective of Env-Ws 388.20(a)(1). Please revise your proposed monitoring plan accordingly.

DES does not agree that there is any scenario where the monitoring of water levels for a period of one year as suggested on page 42, paragraph 1, would be adequate to meet the requirements of Env-Ws 388.23. Monitoring should continue as long as the withdrawal continues, with an option to reduce the monitoring if data warrant, not vice versa as proposed on page 42. For the first several years of operation, reporting to the DES should occur more frequently than proposed on page 42. Water level monitoring data is also needed to support all wetland plot monitoring. Detailed mitigation action plans should be offered regarding both domestic wells and BPW#40. Such plans should propose both triggering thresholds for domestic wells and wetland observations, and also specific responses in each case. Unless the further analysis (involving pump curves) described above indicates otherwise, an "immediate" mitigation program may be required, per Env-Ws 388.21. It may be necessary to undertake mitigation steps for the four wells that show 10% impact, as an immediate permit condition, before pumping begins.

Response: The monitoring and mitigation program is outlined in Attachment II.

Attachment I

Attachment II

Attachment III

Exhibit 4

Exhibit 5

McLane

McLane, Graf,
Raulerson &
Middleton

Professional Association

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OFFICES IN:
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February 28, 2003

Richard W. Head, Asst. Atty. General
N. H. Environmental Protection Bureau
Office of the Attorney General
33 Capitol Street
Concord, NH 03301

Via Fax: 271-2110
and regular mail

Re: USA Springs, Inc.

Dear Richard:

In early February, you and I discussed the fact that the State has taken the unusual step of listing USA Springs as a hazardous waste site on the DES web page. It is unusual, because normally sites that are listed are the locations where there has been a release and/or an identified source of contamination. As you know, USA Springs is not such a site. Rather, it is a 100 acre parcel on which the owner is trying to develop into a drinking water supply. Low levels of what apparently are historical releases on the neighboring K & B Realty property cross diagonally at the southwest corner of the property, approximately a quarter-mile from the two major drinking water projection wells.

You explained this unusual designation of an innocent downgradient property only marginally affected by the neighboring hazardous waste site, as required by Governor Jeanne Shaheen's Executive Order issued last spring. I have obtained a copy of that Executive Order, (which I enclose) and clearly it does not require this action. You also explained that this type of action had been taken previously with respect to other sites, and identified those sites. I have checked those sites and, in those cases, there was a release on the site that was listed on the website, or an identified source. That is not true in this case.

Accordingly, I renew my request that the State remove this site from the list of hazardous waste sites. It is misleading and unfair to do otherwise. I am glad to talk with you about this.

Yours sincerely,

Gregory H. Smith

GHS:sr
cc: Robert Monaco, Acting Commissioner
Anthony Guinta, Supervisor

State of New Hampshire
By Her Excellency
Jeanne Shaheen, Governor

EXECUTIVE ORDER 2002-4

An order requiring the Department of Environmental Services to notify abutters of well contamination

WHEREAS, state law requires public water supply systems to notify each customer of a violation of the State's drinking water standards or when the concentration of MtBE is greater than 5 ppb; and

WHEREAS, there is no current federal or state requirement for notifying abutters to private or public water supply well owners when contamination is discovered in groundwater; and

WHEREAS, it is appropriate to provide notification to abutters of any wells that show groundwater contamination in excess of public drinking water standards and, in the case of MtBE contamination, when the concentration is above 5 ppb; and

WHEREAS, it is appropriate to notify public water suppliers when the groundwater contamination falls within the wellhead protection area of the public water supply, and to notify the health officer of any municipality in which a contaminated groundwater supply is detected, or in which abutting property to the contaminated groundwater supply is located;

NOW, THEREFORE, I, JEANNE SHAHEEN, Governor of the State of New Hampshire, by the authority vested in me pursuant to Part II, Article 41 of the New Hampshire Constitution, do hereby order and direct the Department of Environmental Services, to notify the following individuals and entities of the presence of groundwater contamination, detected on or after July 1, 2002, when one or more regulated contaminants exceeds ambient groundwater quality standards or MtBE concentration is greater than 5 ppb.

(a) The owners of any property which 1) contains a water supply well and 2) is within 500 horizontal feet of a well where contamination is discovered.
(b) Public water suppliers, when the groundwater contamination falls within the wellhead protection area of the public water supply.
(c) The health officer of any municipality in which a contaminated groundwater supply is detected.
(d) The health officer of any municipality in which any property subject to the notification provisions of (a) and (b) is located.

Such notification will be provided in writing within 30 days following confirmation of contamination determined by sampling conducted by the Department or at its direction.

Given under my hand and seal at the Executive Chambers in Concord, this 15 day of May in the year of our Lord, two thousand and two.

Jeanne Shaheen
GOVERNOR OF NEW HAMPSHIRE

Exhibit 6

STATE OF NEW HAMPSHIRE
Department of Environmental Services
Water Division

USA SPRINGS, INC.
RE: Application for Large Groundwater Withdrawal Permit

AFFIDAVIT OF NEIL SHIFRIN

I, Neil Shifrin, Ph.D., having been duly sworn, depose and say as follows:

1. My name is Neil Shifrin. I am the President of Gradient Corporation, an environmental consulting firm located in Cambridge, Massachusetts. I have a BS in Chemical Engineering from the University of Pennsylvania and a doctorate in Environmental Engineering from the Massachusetts Institute of Technology. I have been practicing on water resource, water quality, contaminant transport and fate, and hazardous waste site cleanup projects for over 30 years.

2. I am generally familiar with the work of Gradient Corporation at the USA Springs site. I have experience at more than 100 sites investigating hydrogeological conditions and have been directly involved in more than a dozen water withdrawal tests ("pump tests").

3. Pump tests, even for large municipal well systems, do not cost more than approximately $250,000 to $300,000 to prepare for, implement and evaluate. The requirements that have been imposed on this pump test go far beyond the technical requirements to establish a safe rate, particularly in light of the comprehensive operational monitoring that will be required. These additional requirements, which have added exorbitant expense, will add nothing to the technical information required to address any issues raised by the project opponents and NHDES. The only explanation that I am aware of for doing much more work than was necessary at this site is that there was significant political pressure. Political demands to add

additional work, even if not necessary, were what led the State to increase the process (and the cost to the applicant) and project work requirements far beyond what would be necessary to evaluate this site.

4. Even though it is highly unusual, the State required the applicant in this case to install a water treatment system on clean groundwater which was being discharged into a nearby wetland. The cost of this additional requirement alone was between $50,000 and $100,000. This is not a requirement ordinarily imposed on others conducting pump tests.

Further, the affiant sayeth not.

Neil Shifrin, Ph.D.
Gradient Corporation
238 Main Street
Cambridge, MA 02142

STATE OF MASSACHUSETTS
COUNTY OF MIDDLESEX

Subscribed and sworn to before me, this 11 day of September, 2003.

Notary Public/Justice of the Peace